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2019 F-650/ F-750 Super Duty Chassis Cabs

Specs

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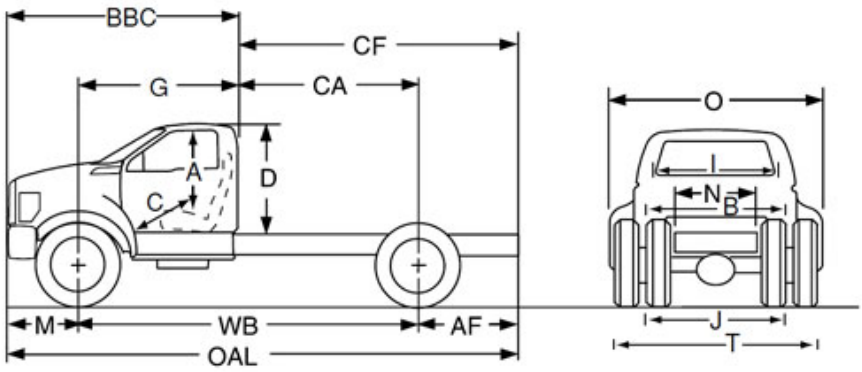
Use

Key product specifications include vehicle dimensions and capacities, detailed engine information, transmission gear ratios and more.

2019 F-650/ F-750 Super Duty Chassis Cabs

Pro Loader

Body Dimensions(1)



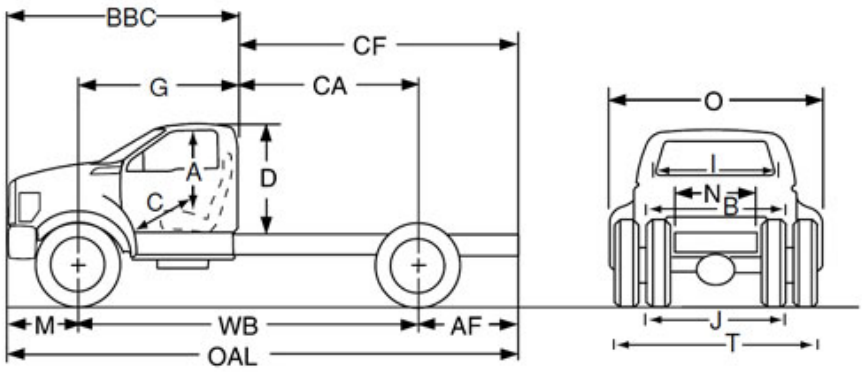
		Pro Loader				
Wheelbase (in.)		**158.0**	**182.0**	**194.0**	**218.0**	**242.0**
Code	**Description**					
CA	Back of Cab to C/L Rear Axle	84.0	108.0	120.0	144.0	168.0
AF	Axle to End of Frame	63.0	75.0	75.0	81.0	93.0
OAL	Overall Length	261.0	297.0	309.0	339.0	382.0
	Head Room	40.7	40.7	40.7	40.7	40.7
	Hip Room	67.6	67.6	67.6	67.6	67.6
	Max. Leg Room	41.4	41.4	41.4	41.4	41.4
D	Frame to Top of Cab (without marker lights)	56.7	56.7	56.7	56.7	57.0
BBC	Front Bumper to Back of Cab	114.4	114.0	114.0	114.0	114.0
G	C/L Front Axle to Back of Cab	74.1	74.1	74.1	74.1	74.1
	Shoulder Room	68.0	68.0	68.0	68.0	68.0
J	Front Tread Width (8.5k/10k) (all 8.5k axle except Tractor)	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7
M	Front Overhang	40.4	40.4	40.4	40.4	40.4
N	Width Between Frame Rails	34.0	34.0	34.0	34.0	34.0
O	Width Over Fenders	95.5	95.5	95.5	95.5	95.5
T	Rear Tread Width — Max. Width 22.5"/19.5"	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3

(1) Dimensions are calculated estimates based on engineering measurements.

2019 F-650/ F-750 Super Duty Chassis Cabs

Straight Frame

Body Dimensions(1)



		Straight Frame					
Wheelbase (in.)		**158.0**	**176.0**	**182.0**	**194.0**	**200.0**	**212.0**
Code	**Description**						
CA	Back of Cab to C/L Rear Axle	84.0	102.0	108.0	120.0	126.0	138.0
AF	Axle to End of Frame	49.0	70.0	70.0	75.0	75.0	81.0
OAL	Overall Length	247.0	286.0	292.0	309.0	315.0	333.0
	Head Room	40.7	40.7	40.7	40.7	40.7	40.7
	Hip Room	67.6	67.6	67.6	67.6	67.6	67.6
	Max. Leg Room	41.4	41.4	41.4	41.4	41.4	41.4
D	Frame to Top of Cab (without marker lights)	56.7	56.7	56.7	56.7	56.7	56.7
BBC	Front Bumper to Back of Cab	114.4	114.4	114.0	114.0	114.0	114.0
G	C/L Front Axle to Back of Cab	74.1	74.1	74.1	74.1	74.1	74.1
	Shoulder Room	68.0	68.0	68.0	68.0	68.0	68.0
J	Front Tread Width (8.5k/10k) (all 8.5k axle except Tractor)	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7
M	Front Overhang	40.4	40.4	40.4	40.4	40.4	40.4
N	Width Between Frame Rails	34.0	34.0	34.0	34.0	34.0	34.0
O	Width Over Fenders	95.5	95.5	95.5	95.5	95.5	95.5
T	Rear Tread Width — Max. Width 22.5"/19.5"	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3

(1) Dimensions are calculated estimates based on engineering measurements.

		Straight Frame					
Wheelbase (in.)		**218.0**	**224.0**	**230.0**	**242.0**	**260.0**	**281**

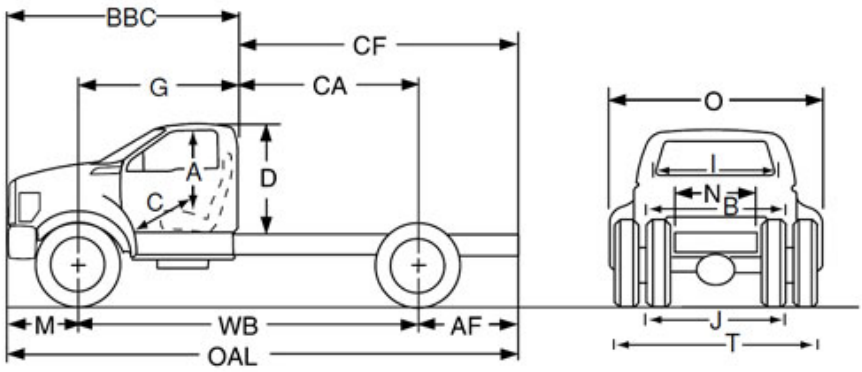
Code	Description						
CA	Back of Cab to C/L Rear Axle	144.0	150.0	156.0	168.0	186.0	207.0
AF	Axle to End of Frame	81.0	87.0	87.0	100.0	120.0	120.0
OAL	Overall Length	339.0	351.0	357.0	382.0	420.0	441.0
A	Head Room	40.7	40.7	40.7	40.7	40.7	40.7
B	Hip Room	67.6	67.6	67.6	67.6	67.6	67.6
C	Max. Leg Room	41.4	41.4	41.4	41.4	41.4	41.4
D	Frame to Top of Cab (without marker lights)	56.7	56.7	56.7	56.7	57.0	57.0
BBC	Front Bumper to Back of Cab	114.0	114.0	114.0	114.0	114.0	114.0
G	C/L Front Axle to Back of Cab	74.1	74.1	74.1	74.1	74.1	74.1
I	Shoulder Room	68.0	68.0	68.0	68.0	68.0	68.0
J	Front Tread Width (8.5k/10k) (all 8.5k axle except Tractor)	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7	—/82.7
M	Front Overhang	40.4	40.4	40.4	40.4	40.4	40.4
N	Width Between Frame Rails	34.0	34.0	34.0	34.0	34.0	34.0
O	Width Over Fenders	95.5	95.5	95.5	95.5	95.5	95.5
T	Rear Tread Width — Max. Width 22.5"/19.5" (tire outside width rear)	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3

(1) Dimensions are calculated estimates based on engineering measurements.

2019 F-650/ F-750 Super Duty Chassis Cabs

Tractor

Body Dimensions(1)



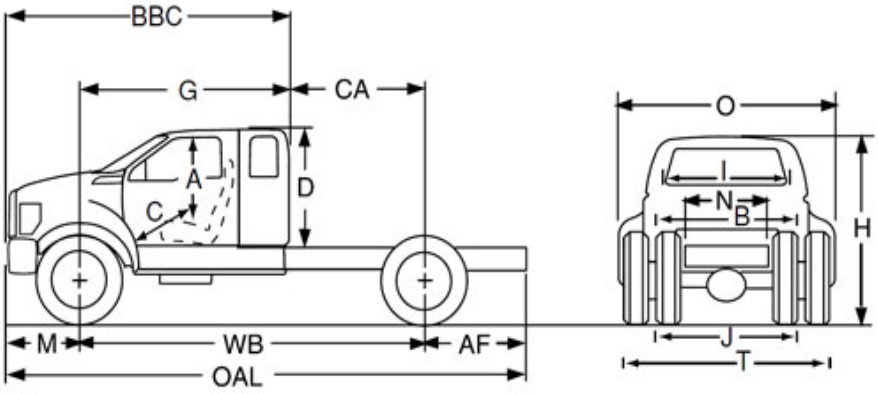
	Tractor	
Wheelbase (in.)	**146.0**	**158.0**
Code	**Description**	
CA	Back of Cab to C/L Rear Axle	72.0	84.0
AF	Axle to End of Frame	39.0	39.0
OAL	Overall Length	225.0	237.0
	Head Room	40.7	40.7
	Hip Room	67.6	67.6
	Max. Leg Room	41.4	41.4
D	Frame to Top of Cab (without marker lights)	56.7	56.7
BBC	Front Bumper to Back of Cab	114.4	114.4
G	C/L Front Axle to Back of Cab	74.1	74.1
	Shoulder Room	68.0	68.0
J	Front Tread Width (8.5k/10k) (all 8.5k axle except Tractor)	—/82.7	—/82.7
M	Front Overhang	40.4	40.4
N	Width Between Frame Rails	34.0	34.0
O	Width Over Fenders	95.5	95.5
T	Rear Tread Width — Max. Width 22.5"/19.5"	97.6/—	97.6/—

(1) Dimensions are calculated estimates based on engineering measurements.

2019 F-650/ F-750 Super Duty Chassis Cabs

Pro Loader

Body Dimensions(1)

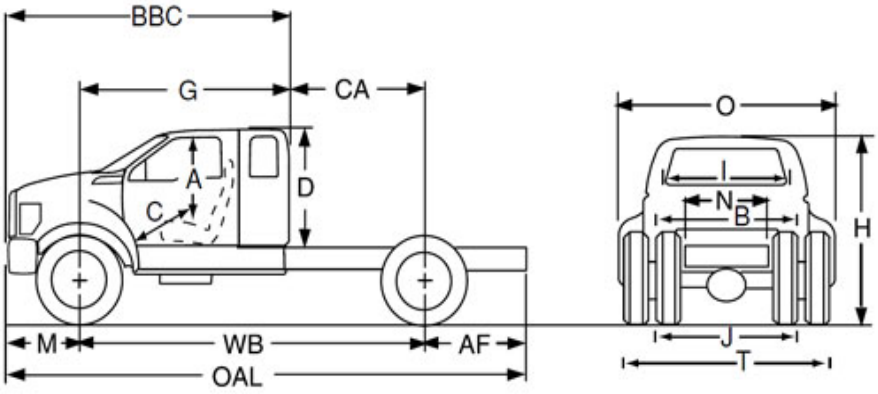


		Pro Loader		
Wheelbase (in.)		**179.0**	**203.0**	**239.0**
Code	**Description**			
CA	Back of Cab to C/L Rear Axle	84.0	108.0	144.0
AF	Axle to End of Frame	63.0	75.0	81.0
OAL	Overall Length	282.0	318.0	360.0
A	Head Room (Front/Rear)	40.7/38.1	40.7/38.1	40.7/38.1
B	Hip Room (Front/Rear)	67.6/67.3	67.6/67.3	67.6/67.3
C	Max. Leg Room (Front/Rear)	41.4/31.6	41.4/31.6	41.4/31.6
D	Frame to Top of Cab (without marker lights)	56.9	56.9	56.9
BBC	Front Bumper to Back of Cab	135.4	135.4	135.4
G	C/L Front Axle to Back of Cab	95.0	95.0	95.0
I	Shoulder Room (Front/Rear)	68.0/68.1	68.0/68.1	68.0/68.1
J	Front Tread Width (8.5k/10k) (all 8.5k axle except Tractor)	84.0/82.7	84.0/82.7	84.0/82.7
M	Front Overhang	40.4	40.4	40.4
N	Width Between Frame Rails	34.1	34.1	34.1
O	Width Over Fenders	95.5	95.5	95.5
T	Rear Tread Width — Max. Width 22.5"/19.5" (tire outside width rear)	97.6/94.3	97.6/94.3	97.6/94.3

(1) Dimensions are calculated estimates based on engineering measurements.

Straight Frame

Body Dimensions(1)



		Straight Frame					
Wheelbase (in.)		**179.0**	**197.0**	**203.0**	**215.0**	**221.0**	**233.0**
Code	**Description**						
CA	Back of Cab to C/L Rear Axle	84.0	102.0	108.0	120.0	126.0	138.0
AF	Axle to End of Frame	49.0	70.0	70.0	75.0	75.0	81.0
OAL	Overall Length	268.0	307.0	313.0	330.0	336.0	354.0
A	Head Room (Front/Rear)	40.7/38.1	40.7/38.1	40.7/38.1	40.7/38.1	40.7/38.1	40.7/38.1
B	Hip Room (Front/Rear)	67.6/67.3	67.6/67.3	67.6/67.3	67.6/67.3	67.6/67.3	67.6/67.3
C	Max. Leg Room (Front/Rear)	41.4/31.6	41.4/31.6	41.4/31.6	41.4/31.6	41.4/31.6	41.4/31.6
D	Frame to Top of Cab (without marker lights)	56.9	56.9	56.9	56.9	56.9	56.9
BBC	Front Bumper to Back of Cab	135.4	135.4	135.4	135.4	135.4	135.4
G	C/L Front Axle to Back of Cab	95.0	95.0	95.0	95.0	95.0	95.0
I	Shoulder Room (Front/Rear)	68.0/68.1	68.0/68.1	68.0/68.1	68.0/68.1	68.0/68.1	68.0/68.1
J	Front Tread Width (8.5k/10k) (all 8.5k axle except Tractor)	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7
M	Front Overhang	40.4	40.4	40.4	40.4	40.4	40.4
N	Width Between Frame Rails	34.1	34.1	34.1	34.1	34.1	34.1
O	Width Over Fenders	95.5	95.5	95.5	95.5	95.5	95.5
T	Rear Tread Width — Max. Width 22.5"/19.5" (tire outside width rear)	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3

(1) Dimensions are calculated estimates based on engineering measurements.

		Straight Frame				
Wheelbase (in.)		**239.0**	**245.0**	**251.0**	**263.0**	**281.0**

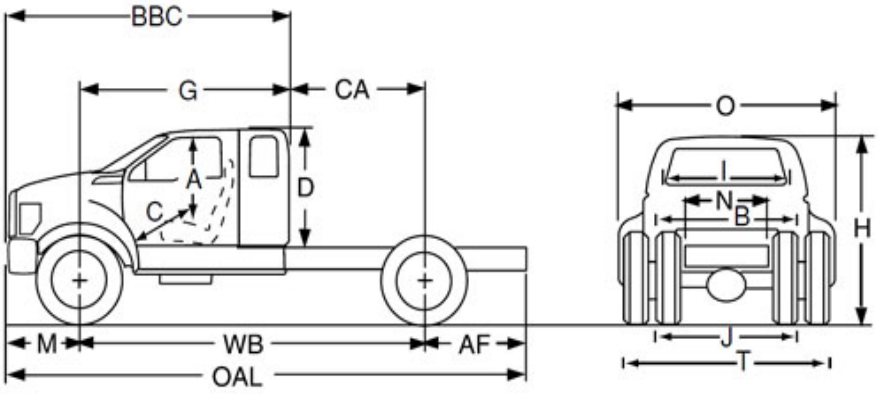
Code	Description					
CA	Back of Cab to C/L Rear Axle	144.0	150.0	156.0	168.0	186.0
AF	Axle to End of Frame	81.0	87.0	87.0	100.0	120.0
OAL	Overall Length	360.0	372.0	378.0	403.0	441.0
A	Head Room (Front/Rear)	40.7/38.1	40.7/38.1	40.7/38.1	40.7/38.1	40.7/38.1
B	Hip Room (Front/Rear)	67.6/67.3	67.6/67.3	67.6/67.3	67.6/67.3	67.6/67.3
C	Max. Leg Room (Front/Rear)	41.4/31.6	41.4/31.6	41.4/31.6	41.4/31.6	41.4/31.6
D	Frame to Top of Cab (without marker lights)	56.9	56.9	56.9	56.9	56.9
BBC	Front Bumper to Back of Cab	135.4	135.4	135.4	135.4	135.4
G	C/L Front Axle to Back of Cab	95.0	95.0	95.0	95.0	95.0
I	Shoulder Room (Front/Rear)	68.0/68.1	68.0/68.1	68.0/68.1	68.0/68.1	68.0/68.1
J	Front Tread Width (8.5k/10k) (all 8.5k axle except Tractor)	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7
M	Front Overhang	40.4	40.4	40.4	40.4	40.4
N	Width Between Frame Rails	34.1	34.1	34.1	34.1	34.1
O	Width Over Fenders	95.5	95.5	95.5	95.5	95.5
T	Rear Tread Width — Max. Width 22.5"/19.5" (tire outside width rear)	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3

(1) Dimensions are calculated estimates based on engineering measurements.

2019 F-650/ F-750 Super Duty Chassis Cabs

Tractor

Body Dimensions(1)



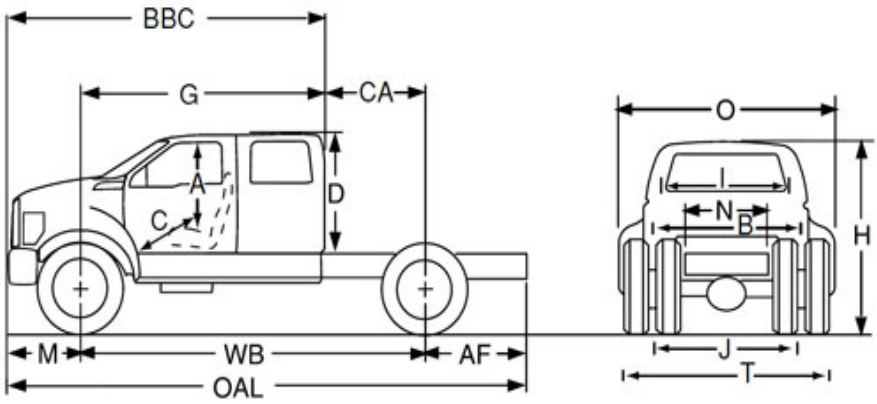
	Tractor	Tractor
Wheelbase (in.)	**167.0**	**179.0**
Code	**Description**	
CA	Back of Cab to C/L Rear Axle	72.0	84.0
AF	Axle to End of Frame	39.0	39.0
OAL	Overall Length	246.0	258.0
A	Head Room (Front/Rear)	40.7/38.1	40.7/38.1
B	Hip Room (Front/Rear)	67.6/67.3	67.6/67.3
C	Max. Leg Room (Front/Rear)	41.4/31.6	41.4/31.6
D	Frame to Top of Cab (without marker lights)	56.9	56.9
BBC	Front Bumper to Back of Cab	135.4	135.4
G	C/L Front Axle to Back of Cab	95.0	95.0
I	Shoulder Room (Front/Rear)	68.0/68.1	68.0/68.1
J	Front Tread Width (8.5k/10k) (all 8.5k axle except Tractor)	–/82.7	–/82.7
M	Front Overhang	40.4	40.4
N	Width Between Frame Rails	34.1	34.1
O	Width Over Fenders	95.5	95.5
T	Rear Tread Width — Max. Width 22.5"/19.5" (tire outside width rear)	97.6/—	97.6/—

(1) Dimensions are calculated estimates based on engineering measurements.

2019 F-650/ F-750 Super Duty Chassis Cabs

Pro Loader

Body Dimensions(1)



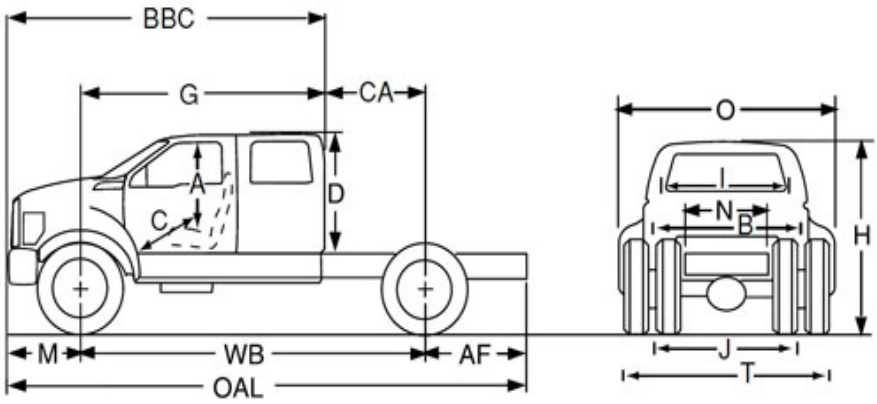
	Pro Loader		
Wheelbase (in.)	**194.0**	**218.0**	**254.0**
Code	**Description**		
CA	Back of Cab to C/L Rear Axle	84.0	108.0	144.0
AF	Axle to End of Frame	63.0	75.0	96.0
OAL	Overall Length	297.0	333.0	390.0
A	Head Room (Front/Rear)	40.7/40.8	40.7/40.8	40.7/40.8
B	Hip Room (Front/Rear)	67.6/67.6	67.6/67.6	67.6/67.6
C	Max. Leg Room (Front/Rear)	41.4/42.1	41.4/42.1	41.4/42.1
D	Frame to Top of Cab (without marker lights)	57.4	57.4	57.4
BBC	Front Bumper to Back of Cab	149.9	149.9	149.9
G	C/L Front Axle to Back of Cab	109.5	109.5	109.5
I	Shoulder Room (Front/Rear)	68.0/68.0	68.0/68.0	68.0/68.0
J	Front Tread Width (8.5k/10k) (all 8.5k axle except Tractor)	84.0/82.7	84.0/82.7	84.0/82.7
M	Front Overhang	40.4	40.4	40.4
N	Width Between Frame Rails	34.1	34.1	34.1
O	Width Over Fenders	95.5	95.5	95.5
T	Rear Tread Width — Max. Width 22.5"/19.5" (tire outside width rear)	97.6/94.3	97.6/94.3	97.6/94.3

(1) Dimensions are calculated estimates based on engineering measurements.

2019 F-650/ F-750 Super Duty Chassis Cabs

Straight Frame

Body Dimensions(1)



		Straight Frame					
Wheelbase (in.)		182.0	194.0	212.0	218.0	230.0	236.0
Code	Description						
CA	Back of Cab to C/L Rear Axle	72.0	84.0	102.0	108.0	120.0	126.0
AF	Axle to End of Frame	39.0/49.0	49.0	70.0	70.0	75.0	75.0
OAL	Overall Length	261/271	283.0	322.0	328.0	345.0	351.0
A	Head Room (Front/Rear)	40.7/40.8	40.7/40.8	40.7/40.8	40.7/40.8	40.7/40.8	40.7/40.8
B	Hip Room (Front/Rear)	67.6/67.6	67.6/67.6	67.6/67.6	67.6/67.6	67.6/67.6	67.6/67.6
C	Max. Leg Room (Front/Rear)	41.4/42.1	41.4/42.1	41.4/42.1	41.4/42.1	41.4/42.1	41.4/42.1
D	Frame to Top of Cab (without marker lights)	57.4	57.4	57.4	57.4	57.4	57.4
BBC	Front Bumper to Back of Cab	149.9	149.9	149.9	149.9	149.9	149.9
G	C/L Front Axle to Back of Cab	109.5	109.5	109.5	109.5	109.5	109.5
I	Shoulder Room (Front/Rear)	68.0/68.0	68.0/68.0	68.0/68.0	68.0/68.0	68.0/68.0	68.0/68.0
J	Front Tread Width (8.5k/10k) (all 8.5k axle except Tractor)	—/82.7	—/82.7	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7
M	Front Overhang	40.4	40.4	40.4	40.4	40.4	40.4
N	Width Between Frame Rails	34.1	34.1	34.1	34.1	34.1	34.1
O	Width Over Fenders	95.5	95.5	95.5	95.5	95.5	95.5
T	Rear Tread Width — Max. Width 22.5"/19.5" (tire outside width rear)	97.6	97.6	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3

(1) Dimensions are calculated estimates based on engineering measurements.

		Straight Frame				
Wheelbase (in.)		248.0	254.0	260.0	266.0	278.0

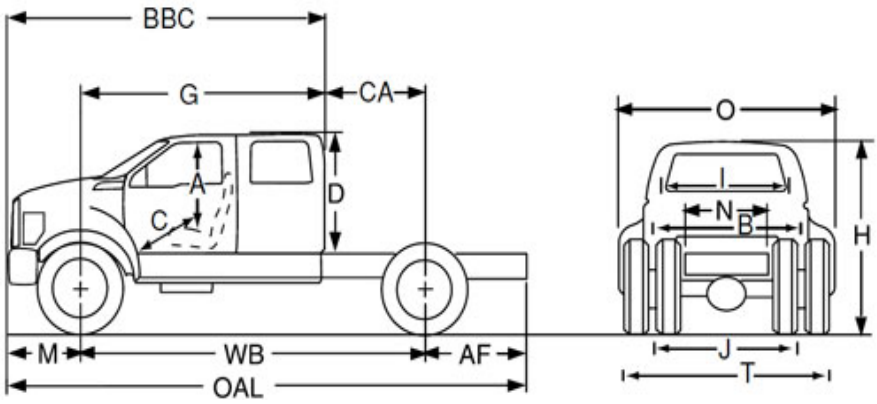
Code	Description					
CA	Back of Cab to C/L Rear Axle	138.0	144.0	150.0	156.0	168.0
AF	Axle to End of Frame	81.0	81.0	87.0	87.0	100.0
OAL	Overall Length	369.0	375.0	387.0	393.0	418.0
A	Head Room (Front/Rear)	40.7/40.8	40.7/40.8	40.7/40.8	40.7/40.8	40.7/40.8
B	Hip Room (Front/Rear)	67.6/67.6	67.6/67.6	67.6/67.6	67.6/67.6	67.6/67.6
C	Max. Leg Room (Front/Rear)	41.4/42.1	41.4/42.1	41.4/42.1	41.4/42.1	41.4/42.1
D	Frame to Top of Cab (without marker lights)	57.4	57.4	57.4	57.4	57.4
BBC	Front Bumper to Back of Cab	149.9	149.9	149.9	149.9	149.9
G	C/L Front Axle to Back of Cab	109.5	109.5	109.5	109.5	109.5
I	Shoulder Room (Front/Rear)	68.0/68.0	68.0/68.0	68.0/68.0	68.0/68.0	68.0/68.0
J	Front Tread Width (8.5k/10k) (all 8.5k axle except Tractor)	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7	84.0/82.7
M	Front Overhang	40.4	40.4	40.4	40.4	40.4
N	Width Between Frame Rails	34.1	34.1	34.1	34.1	34.1
O	Width Over Fenders	95.5	95.5	95.5	95.5	95.5
T	Rear Tread Width — Max. Width 22.5"/19.5" (tire outside width rear)	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3	97.6/94.3

(1) Dimensions are calculated estimates based on engineering measurements.

2019 F-650/ F-750 Super Duty Chassis Cabs

Tractor

Body Dimensions(1)



	Tractor
Wheelbase (in.)	**182.0**

Code	Description	
CA	Back of Cab to C/L Rear Axle	72.0
AF	Axle to End of Frame	39.0/49.0
OAL	Overall Length	261/271
A	Head Room (Front/Rear)	40.7/40.8
B	Hip Room (Front/Rear)	67.6/67.6
C	Max. Leg Room (Front/Rear)	41.4/42.1
D	Frame to Top of Cab (without marker lights)	57.4
BBC	Front Bumper to Back of Cab	149.9
G	C/L Front Axle to Back of Cab	109.5
I	Shoulder Room (Front/Rear)	68.0/68.0
J	Front Tread Width (8.5k/10k) (all 8.5k axle except Tractor)	—/82.7
M	Front Overhang	40.4
N	Width Between Frame Rails	34.1
O	Width Over Fenders	95.5
T	Rear Tread Width — Max. Width 22.5"/19.5" (tire outside width rear)	97.6

(1) Dimensions are calculated estimates based on engineering measurements.

Fuel Tank Capacity

- All gasoline engine models feature a single left-side-mounted steel tank T.Obj: 38
  - 50-gallon tank is standard on Regular Cab and SuperCab
  - 60-gallon tank is standard on F-650 Crew Cab and optional on all other models
- All diesel engine models feature a single left-side-mounted aluminum tank
  - 50-gallon tank is standard on Regular Cab
  - 55-gallon tank is optional on Regular Cab F-650/F-750 Straight Frame and Tractor models
  - 65-gallon tank is standard on SuperCab and Crew Cab and optional on Regular Cab
- Diesel engine models also offer a dual tank with 115-gallon capacity (65-gallon left side, 50-gallon right side) for longer distances between fill-ups
  - Dual fuel tanks use a selector valve (switch is in cab) for equalization

Gasoline Fuel Tank Capacities				
Capacity (gal.)	**Tank Type**	**Ordering Code**	**Tank Label Capacity (gal.)**	**Tank Usable Capacity (gal.)**
50	Steel, single, left-hand, rectangular	65A	50	47
60	Steel, single, left-hand, rectangular	65D	60	59
Diesel Fuel Tank Capacities				
Capacity (gal.)	**Tank Type**	**Ordering Code**	**Tank Label Capacity (gal.)**	**Tank Usable Capacity (gal.)**
50	Aluminum, single, left-hand, rectangular	65B	50	47
55	Aluminum, single, left-hand, D-shape	65C	56	53
65	Aluminum, single, left-hand, rectangular	65E	65	61
115	Aluminum, dual rectangular	65F	65/56 (left/right)	61/53 (left/right)

NOTE: See the latest Body Builders Layout Book for fuel tank mounting and locations.

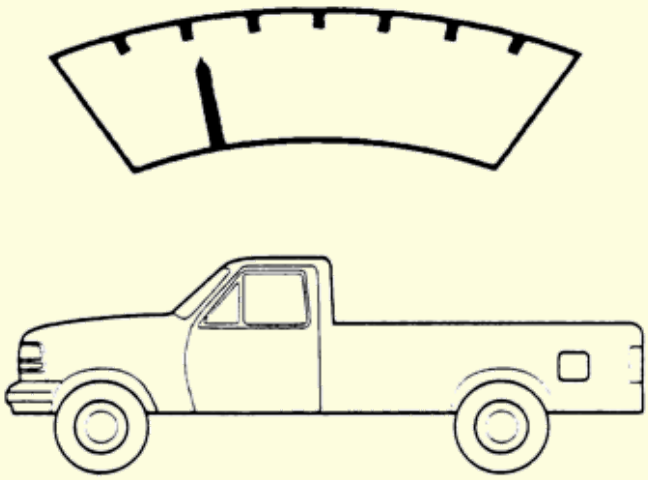
2019 F-650/ F-750 Super Duty Chassis Cabs

Base Curb Weight

Specs > Dimensions/Weights/Capacities > General Truck Payload Information

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/basic-truck-weight-definitions-mdash-actual-weights/base-curb-weight/jcr:content/content/imageGallery

- The weight of the vehicle including standard equipment, oil, lubricants and a full tank of fuel. It does not include the weight of driver, passengers, cargo or any optional or aftermarket equipment
- **Base curb weights for each engine/standard equipment transmission combination are listed in the Weight Ratings pages of each vehicle section (see Maximum Payload Weight Ratings for reference)**
- Actual Regular Production Option Content Weights can be found in the charts under Actual Regular Production Option Content Weights



END OF REFERENCE BLOCK

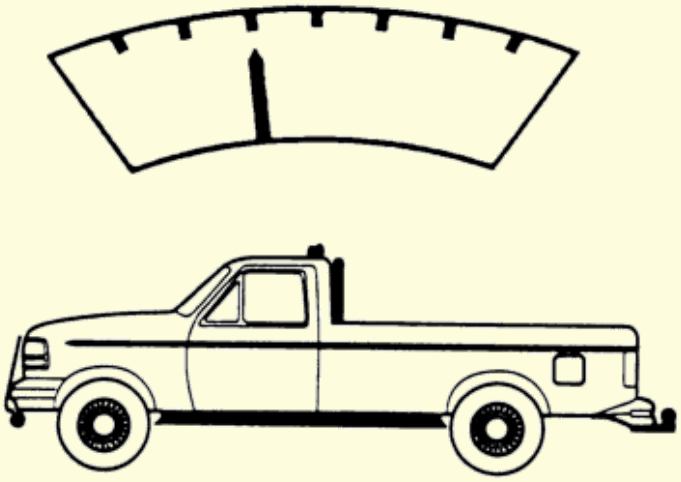
2019 F-650/ F-750 Super Duty Chassis Cabs

Option Weights

Specs > Dimensions/Weights/Capacities > General Truck Payload Information

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/basic-truck-weight-definitions-mdash-actual-weights/option-weights/jcr:content/content/imageGallery

The weight of any added equipment that is not included in the base curb weight.



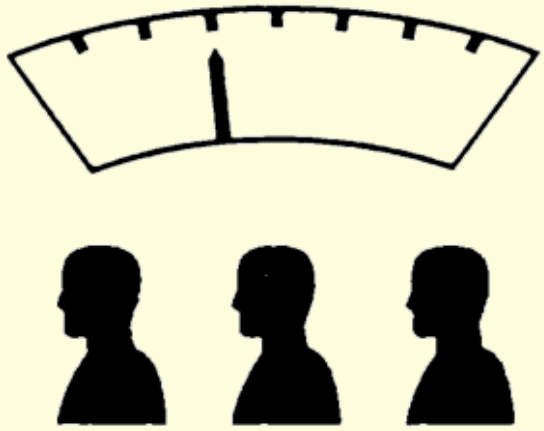
END OF REFERENCE BLOCK

2019 F-650/ F-750 Super Duty Chassis Cabs

Passenger Weight

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/basic-truck-weight-definitions-mdash-actual-weights/passenger-weight/jcr:content/content/imageGallery

Defined as 150 lbs. multiplied by the number of safety-belted seating positions, including the driver, that the vehicle can carry.



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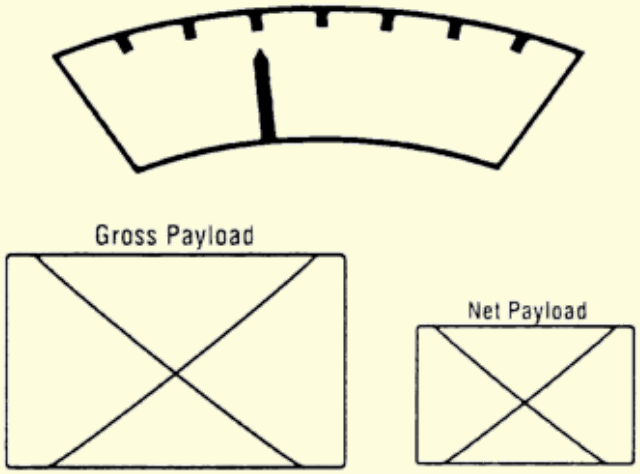
2019 F-650/ F-750 Super Duty Chassis Cabs

Payload

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/basic-truck-weight-definitions-mdash-actual-weights/payload/jcr:content/content/imageGallery

- Maximum payload is defined as the weight of all passengers, optional and aftermarket equipment, and cargo
- Net payload is defined as the weight that can be placed in the truck after subtracting for driver, passengers, and optional and aftermarket equipment



END OF REFERENCE BLOCK

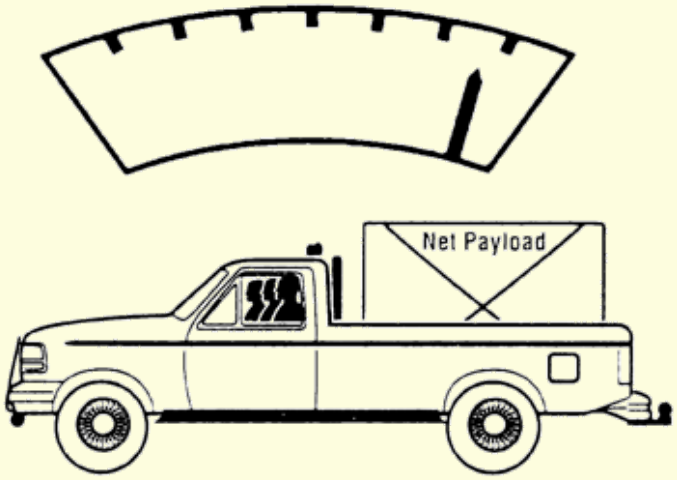
2019 F-650/ F-750 Super Duty Chassis Cabs

Gross Vehicle Weight (GVW)

Specs > Dimensions/Weights/Capacities > General Truck Payload Information

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/basic-truck-weight-definitions-mdash-actual-weights/gross-vehicle-weight-gvw/jcr:content/content/imageGallery

The weight of the vehicle including driver, passengers, optional and aftermarket equipment, and all cargo.



END OF REFERENCE BLOCK

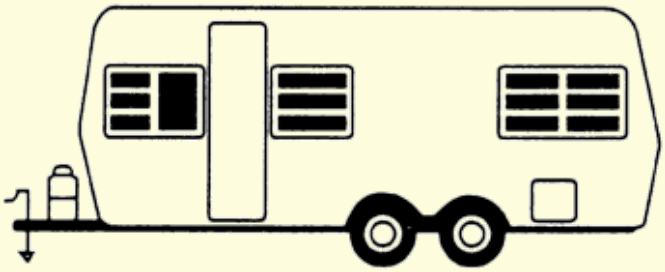
2019 F-650/ F-750 Super Duty Chassis Cabs

Trailer Weight

Specs > Dimensions/Weights/Capacities > General Truck Payload Information

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/basic-truck-weight-definitions-mdash-actual-weights/trailer-weight/jcr:content/content/imageGallery

The weight of a fully loaded trailer, including all attachments, lights, etc.



END OF REFERENCE BLOCK

2019 F-650/ F-750 Super Duty Chassis Cabs

Gross Combination Weight (GCW)

Specs > Dimensions/Weights/Capacities > General Truck Payload Information

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/basic-truck-weight-definitions-mdash-actual-weights/gross-combination-weight-gcw/jcr:content/content/imageGallery

Gross vehicle weight plus the trailer weight.

END OF REFERENCE BLOCK

2019 F-650/ F-750 Super Duty Chassis Cabs

Gross Axle Weight

Specs > Dimensions/Weights/Capacities > General Truck Payload Information

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/basic-truck-weight-definitions-mdash-actual-weights/gross-axle-weight/jcr:content/content/imageGallery

The total weight placed on each axle of the vehicle (front and rear).

END OF REFERENCE BLOCK

2019 F-650/ F-750 Super Duty Chassis Cabs

Tongue Weight

Specs > Dimensions/Weights/Capacities > General Truck Payload Information

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/basic-truck-weight-definitions-mdash-actual-weights/tongue-weight/jcr:content/content/imageGallery

The amount of the trailer's weight that bears down on the trailer hitch (10 to 15 percent of the total loaded conventional trailer weight or 15 to 25 percent of the total loaded 5th-wheel trailer weight).

END OF REFERENCE BLOCK

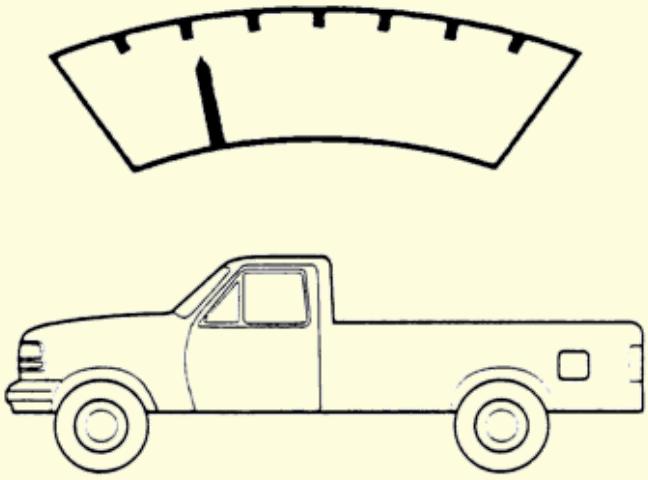
2019 F-650/ F-750 Super Duty Chassis Cabs

Weight Distribution

Specs > Dimensions/Weights/Capacities > General Truck Payload Information

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/basic-truck-weight-definitions-mdash-actual-weights/weight-distribution/jcr:content/content/imageGallery

That portion of a vehicle's total weight that will be supported by each axle and each tire. Proper distribution of vehicle weight is critical to braking, handling and to the service life of components such as axles, springs, bearings and tires.



END OF REFERENCE BLOCK

2019 F-650/ F-750 Super Duty Chassis Cabs

Maximum Payload Weight Rating

Specs > Dimensions/Weights/Capacities > General Truck Payload Information

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/basic-truck-weight-definitions-mdash-weight-ratings/maximum-payload-weight-rating/jcr:content/content/imageGallery

This is the advertised payload rating. It is the maximum allowable payload for the truck, including driver, passengers, optional and aftermarket equipment, and cargo. The weight of the engine and its standard transmission is already factored into the Maximum Payload Weight Rating. If the engine is also available with an optional transmission, that engine/transmission weight can be found in the Actual Regular Production Option Content Weight charts.

Vehicle Payload Calculation	Front/Total (lbs.)
Maximum Payload Weight Rating(1)	____/____
Less Total Actual Regular Production Option Content Weight (from Line A, Payload/GVWR Worksheet)	____/____
Equals Net Total Vehicle Payload (Front and rear axles and spring capacities will be sufficient to carry this payload uniformly distributed in vehicle cargo area)	____/____

(1) Weight for driver and passengers must be deducted. Refer to the individual vehicle weight rating pages for maximum payload weight ratings. Refer to Regular Production Option Content Weight.

NOTE: Front springs are computer-selected to meet specific option requirements for each vehicle; HD front springs are standard if vehicle option weights require.

END OF REFERENCE BLOCK

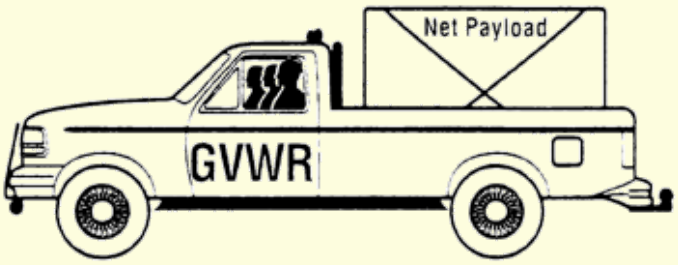
2019 F-650/ F-750 Super Duty Chassis Cabs

Gross Vehicle Weight Rating (GVWR)

Specs > Dimensions/Weights/Capacities > General Truck Payload Information

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/basic-truck-weight-definitions-mdash-weight-ratings/gross-vehicle-weight-rating-gvwr/jcr:content/content/imageGallery

The maximum allowable weight of the fully loaded vehicle (including passengers and cargo).



END OF REFERENCE BLOCK

2019 F-650/ F-750 Super Duty Chassis Cabs

Gross Axle Weight Rating (GAWR)

Specs > Dimensions/Weights/Capacities > General Truck Payload Information

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/basic-truck-weight-definitions-mdash-weight-ratings/gross-axle-weight-rating-gawr/jcr:content/content/imageGallery

The maximum allowable weight to be placed on an individual axle (front or rear). Gross Axle Weight Ratings are provided for both front and rear axles.

END OF REFERENCE BLOCK

2019 F-650/ F-750 Super Duty Chassis Cabs

Gross Combination Weight Rating (GCWR)

Specs > Dimensions/Weights/Capacities > General Truck Payload Information

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/basic-truck-weight-definitions-mdash-weight-ratings/gross-combination-weight-rating-gcwr/jcr:content/content/imageGallery

The maximum allowable weight of the towing vehicle, the trailer and all associated passengers, cargo and equipment.

The point to remember is that the actual weights should never exceed the listed weight ratings. And remind your customers that if they do exceed the recommended weight ratings, they could disqualify their warranty coverage.

END OF REFERENCE BLOCK

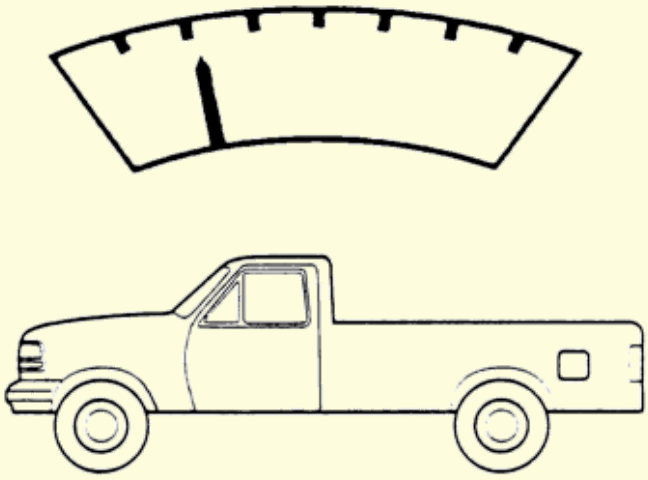
2019 F-650/ F-750 Super Duty Chassis Cabs

Maximum Payload Weight Ratings

Specs > Dimensions/Weights/Capacities > General Truck Payload Information

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/maximum-payload-weight-ratings/jcr:content/content/imageGallery

The Payload Weight Ratings and the Accessory Reserve Capacity(1) (ARC) or maximum allowable weight for regular production option charts are published and can be found in the weight ratings pages of the individual vehicle sections. This information is grouped together with other model, engine/transmission and maximum gross vehicle weight rating (GVWR) data for ease of use.



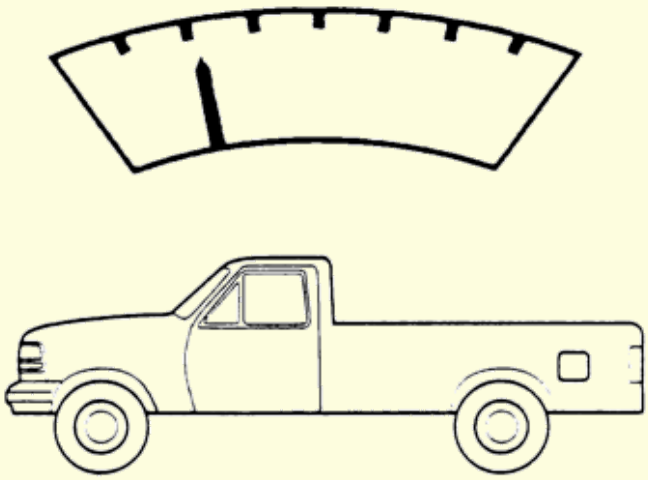
(1) Accessory Reserve Capacity (ARC) weight is the maximum allowable weight for regular production options and aftermarket equipment for models with standard equipment and the indicated engine/transmission combination.

END OF REFERENCE BLOCK

Accessory Reserve Capacity (ARC) Calculation

Ref: /content/ret-ford/en/common-content/appendices/2015/truck-payload/accessory-reserve-capacity-arc-calculation/jcr:content/content/imageGallery

This section provides the information needed to calculate the effect that vehicle options have on the payload capacity of Ford light trucks.



This information is useful to customers who plan to add aftermarket accessories or haul cargo at or near the vehicle's maximum capacity.

This section includes charts for each series, listing the maximum allowable weights for each GVWR.

Accessory Reserve Capacity

You can help prospective buyers estimate the total weight of accessories, equipment and modifications that may be added to the completed vehicle.

Ford vehicles are certified for compliance with the following FMVSS (Federal Motor Vehicle Safety Standards) or CMVSS (Canadian Motor Vehicle Safety Standards):(1)

- 204 — Steering Column Rearward Displacement
- 208 — Occupant Crash Protection
- 212 — Windshield Mounting
- 219 — Windshield Zone Intrusion
- 301 — Fuel System Integrity
- 303 — CNG Fuel System Integrity (Canadian Standard 301.2)

The total added accessory weight must not exceed the allowable weight shown in the tables. You should make retail customers who intend to modify or install accessories or equipment aware of this fact.

If the modification or installation of accessories or equipment causes the unloaded weight of the vehicle, as revised with the added equipment, to exceed the test vehicle weight, the U.S. vehicle alterer(2) may be responsible to certify the altered vehicle according to Title 49, Code of Federal Regulations 567.7 and 568.8. A Canadian vehicle alterer may be responsible to certify the altered vehicle according to Section 6 of the Canadian Motor Vehicle Safety Regulations.

In this section, each vehicle has a worksheet that addresses Total Accessory Reserve Capacity only. It does not consider Front Axle Accessory Reserve Capacity and does not include DSO option weights in the calculations.

(1) Ford Motor Company's certification of compliance with FMVSS/CMVSS is based on specific vehicle test weights. These standards are applicable to completed vehicles of 10,000-lb. GVWR or less. Maximum allowable weights shown in the tables for vehicles above 10,000-lb. GVWRs are maximum recommended values for optimum performance, durability and customer satisfaction.

(2) The same procedure to estimate the "Total Accessory Reserve Capacity" is recommended to completed vehicle alterers in Canada.

To approximate the amount of accessory equipment or modification weight that can be added to a Ford light truck without exceeding the test vehicle weight, calculate an estimated Total Accessory Reserve Capacity as follows:

1. Determine the "Total Actual Regular Production Option Content Weight" of the desired regular production options from the corresponding Accessory Reserve Capacity Calculation/Worksheet on the following page.
2. Subtract the "Total Actual Regular Production Option Content Weight" from the "Maximum Allowable Weight (Regular Production Options & Aftermarket Equipment)" for the appropriate model. The difference is the estimated "Total Accessory Reserve Capacity."

	Maximum Allowable Weight (Regular Production Options & Aftermarket Equipment)
–	**Total Actual Regular Production Option Content Weight**
=	**Total Accessory Reserve Capacity**

Warning: The Accessory Reserve Capacity weight information addresses FMVSS and CMVSS Nos. 204, 208, 212, 219, 301 and 303 compliance only. For all light-duty trucks with a GVW rating under 8500 lbs., federally certified trucks with a GVW rating of 8500 to 10,000 lbs. that are optionally emission certified to light-duty standards and all California complete vehicles with a GVW rating of 14,000 lbs. or less, if more than 500 lbs. is added to the vehicle's "maximum vehicle weight,"(1) the modifier may be responsible for recertification to the applicable EPA or CARB emissions standards.

(1) **Important:** "Maximum vehicle weight" is calculated in accordance with the definition provided in an EPA guidance letter dated July 13, 1979, from C.N. Freed of the EPA to M.H. McBride, legal counsel of the Recreation Vehicle Industry Association. The preceding conditions are based on that letter and on EPA Advisory Circular No. 64 — a March 7, 1977, publication that provides guidance on the need for separate certification of vehicles modified after original manufacture, but prior to sale and delivery to the ultimate purchaser. Additional guidance or questions concerning EPA's policies with respect to alterers of completed vehicles should be directed to legal counsel or the Environmental Protection Agency.

END OF REFERENCE BLOCK

2019 F-650/ F-750 Super Duty Chassis Cabs

Truck "Nominal Tonnage"

Specs > Dimensions/Weights/Capacities > General Truck Payload Information

Ref: /content/ret-ford/en/common-content/appendices/2019/truck-payload/truck-nominal-tonnage/jcr:content/content/text

"Nominal Tonnage" is a term that Ford and other manufacturers have historically used to generally categorize the load capacity of a vehicle series; it is not a term defined by federal or state law.

Our COV (Certificate of Origin for a Vehicle) includes each particular vehicle's shipping weight as well as the vehicle's gross vehicle weight rating or GVWR (from which one can determine the particular vehicle's rated carrying capacity, including driver, passengers, fluids, body upfit [if applicable] and aftermarket accessories). The COV also includes the vehicle's "Nominal Tonnage."

"Nominal Tonnage" provides the general usable cargo capability that most (but not all) of the vehicles with the designated nominal tonnage can expect to handle. That is, nominal tonnage states the general load capacity for each vehicle series, although particular vehicles may have a higher (or in some circumstances, lower) load capacity based on the specifications of the particular vehicle.

Relevant Vehicle Series/Nominal Tonnage Relationship Categories	
Nominal Tonnage	**Vehicle**
½	Ranger, F 150, Transit Connect
¾	E 350 Cutaway/Stripped Chassis, Transit 150 Cargo Van/Passenger Van, Transit 250 Cargo Van, Transit 350 Cargo Van/Passenger Van, Transit 250/350 Cutaway/Chassis Cab, F 250 Pickup
1	E-450 Cutaway/Stripped Chassis, F-350 Pickup, F-350 Chassis Cab
1½	Transit 350 Cargo Van/Passenger Van, Transit 350 Cutaway/Chassis Cab, F 450 Pickup, F 450 Chassis Cab
2	F-550 Chassis Cab

END OF REFERENCE BLOCK

Vehicle Class Ratings by GVWR

Ref: /content/ret-ford/en/common-content/appendices/2019/truck-payload/vehicle-class-ratings-by-gvwr/jcr:content/content/text

Weight Class	GVWR Range (lbs.)	Vehicle/Model
1	Up to 6000	Transit Connect (5060–5450 lbs.) Cargo Van (5130–5302 lbs.) Passenger Van (5060–5450 lbs.)
2	6001 to 10,000	Ranger (6050 lbs.) Transit-150 Cargo Van/Passenger Van (8600/8550 lbs.) Transit-250 Cargo Van (9000 lbs.) Transit-350 Cargo Van (9250–9950 lbs.) Transit-350 Passenger Van (9000–9400 lbs.) Transit-250 Cutaway/Chassis Cabs (9000 lbs.) Transit-350 Cutaway/Chassis Cabs (9500 and 9950 lbs.) F-150 (6070–7850 lbs.) F-250 Pickup (9900–10,000 lbs.) F-350 Pickup (9900–10,000 lbs.) F-350 Chassis Cab SRW (9800–10,000 lbs.)
3	10,001 to 14,000	E-350 Cutaway (10,050–12,500 lbs.) E-350 Stripped Chassis (11,500–12,500 lbs.) Transit-350 Cargo Van/Passenger Wagon (10,360 lbs.) Transit-350 Cutaway/Chassis Cab (10,360 lbs.) F-350 SRW Pickup (10,100–11,500 lbs.) F-350 DRW Pickup (13,000(1)–14,000 lbs.) F-350 Chassis Cab SRW (10,500–11,500 lbs.) F-350 DRW Chassis Cab (14,000 lbs.) E 450 Cutaway and Stripped Chassis (14,000 lbs.) F-450 Pickup (14,000 lbs.)
4	14,001 to 16,000	E-450 Cutaway (14,200–14,500 lbs.) E-450 Stripped Chassis (14,500 lbs.) F-450 Chassis (15,000–16,000 lbs.) F59 Commercial Stripped Chassis (16,000 lbs.) F53 Motorhome Chassis (16,000 lbs.)
5	16,001 to 19,500	F-450 Chassis Cab (16,500 lbs.) F-550 (17,500.–19,500 lbs.) F59 Commercial Stripped Chassis (19,500 lbs.) F53 Motorhome Chassis (18,000 lbs.)
6	19,501 to 26,000	F-650 Gasoline (22,000–26,000 lbs.) Diesel (20,500–26,000 lbs.) F59 Commercial Stripped Chassis (22,000 lbs.) F53 Motorhome Chassis (20,500 –26,000 lbs.)
7	26,001 to 33,000	F-650 (27,200–29,000 lbs. Gas and Diesel) F-750 (30,200–33,000 lbs. Gas and Diesel)
8	33,001 plus	F-750 (33,300–37,000 lbs. Diesel)

(1) 13,000 lbs. pickup box delete only.

END OF REFERENCE BLOCK

Pro Loader

Series	Cab Style	Wheelbase Range (in.)	Total Curb Weight (lbs.)(2) Gas/Diesel
F-650 Pro Loader (Hydraulic)	Regular Cab	158	8748/9407
		182	8852/9511
		194	8886/9545
		218	8969/9628
		242	9154/9813
	SuperCab	179	9024/9683
		203	9108/9765
		239	9242/9901
	Crew Cab	194	9230/9889
		218	9303/9962
		254	9527/10,186
F-650 Pro Loader (Air)	Regular Cab	158	—/10,849
		182	—/10,953
		194	—/10,987
		218	—/11070
		242	—/11,255
	SuperCab	179	—/11,125
		203	—/11,207
		239	—/11,343
	Crew Cab	194	—/10,331
		218	—/10,404
		254	—/10,628

(1) Includes minimum required and standard equipment, water and oil.

(2) Calculated estimates based on engineering component weights — not actual vehicle weights.

F-650 Straight Frame — Hydraulic Brakes

Series	Cab Style	Wheelbase Range (in.)	Total Curb Weight (lbs.)[2] Gas/Diesel
F-650 Straight Frame (Hydraulic)	Regular Cab	158	8912/9669
		176	9028/9780
		182	9067/9817
		194	9144/9891
		200	9183/9928
		212	9260/10,002
		218	9298/10,039
		224	9337/10,076
		230	9376/10,113
		242	9453/10,187
		260[3]	9569/10,298
		281	10,746/11,499
	SuperCab	179	9400/10,136
		197	9516/10484
		203	9555/10,302
		215	9670/10,384
		221	9709/10,425
		233	9748/10,508
		239	9777/10,549
		245	9825/10,591
		251	9873/10,632
		263[3]	9941/10,715
		281	11,144/11,897
	Crew Cab	182	9702/10,386
		194	9779/10,484
		212	9895/10,632
		218	9933/10,681
		230	10,011/10,779
		236	10,059/10,829
		248	10,136/10,927
		254[3]	10,156/10,976
		260[3]	10,204/11,025

		266[3]	10,252/11,075
		278[3]	10,348/11,173

(1) Includes minimum required and standard equipment, water and oil.

(2) Calculated estimates based on engineering component weights — not actual vehicle weights.

(3) Not available with 533 frame.

F-650 Straight Frame — Air Brakes

Series	Cab Style	Wheelbase Range (in.)	Total Curb Weight (lbs.)(2) Gas/Diesel
F-650 Straight Frame (Air)	Regular Cab	158	—/11,032
		176	—/11,154
		182	—/11,172
		194	—/11,222
		200	—/11,253
		212	—/11,301
		218	—/11,338
		224	—/11,392
		230	—/11,410
		242	—/11,492
		260(3)	—/11,587
		281	11,119/11,822
	SuperCab	179	—/11,312
		197	—/11,419
		203	—/11,432
		215	—/11,485
		221	—/11,520
		233	—/11,570
		239	—/11,589
		245	—/11,594
		251	—/11,671
		263(3)	—/11,728
		281	11,517/12,270
	Crew Cab	182	—/11,454
		194	—/11,521
		212	—/11,621
		218	—/11,654
		230	—/11,728
		236	—/11,748
		248	—/11,789
		254(3)	—/11,805
		260(3)	—/11,860

		266[3]	—/11877
		278[3]	—/11,947

(1) Includes minimum required and standard equipment, water and oil.

(2) Calculated estimates based on engineering component weights — not actual vehicle weights.

(3) Not available with 533 frame.

F-750 Straight Frame — Hydraulic Brakes

Series	Cab Style	Wheelbase Range (in.)	Total Curb Weight (lbs.)(2) Gas/Diesel
F-750 Straight Frame (Hydraulic)	Regular Cab	158	9240/10,039
		176	9367/10,179
		182	9409/10,225
		194	9493/10,318
		200	9536/10,364
		212	9621/10,457
		218	9663/10,503
		224	9706/10,550
		230	9747/10,596
		242	9833/10,689
		260	9960/10,828
		281 with 539 frame	10616/11,500
		281 with 536 frame and 41R	11,337/12,221
	SuperCab	179	9738/10,539
		197	9865/10,691
		203	9908/10,742
		215	9993/10,843
		221	10,035/10,894
		233	10,119/11,005
		239	10,175/11,046
		245	10,204/11,096
		251	10,251/11,147
		263	10,331/11,248
		281 with 539 frame	10,963/11,908
		281 with 536 frame and 41R	11,684/12,628
	Crew Cab	182	10,044/11,094
		194	10,128/11,157
		212	10,256/11,250
		218	10,298/11,281
		230	10,382/11,343

		236	10,430/11,375
		248	10,514/11,437
		254	10,546/11,468
		260	10,594/11,499
		266	10,642/11,530

(1) Includes minimum required and standard equipment, water and oil.

(2) Calculated estimates based on engineering component weights — not actual vehicle weights.

F-750 Straight Frame — Air Brakes

Series	Cab Style	Wheelbase Range (in.)	Total Curb Weight (lbs.)[2] Gas/Diesel
F-750 Straight Frame (Air)	Regular Cab	158	—/11,242
		176	—/11,385
		182	—/11,406
		194	—/11,465
		200	—/11,500
		212	—/11,558
		218	—/11,598
		224	—/11,659
		230	—/11,680
		242	—/11,775
		260	—/11,891
		281 with 539 frame	—/12,405
		281 with 536 frame and 41R	—/13,088
	SuperCab	179	—/11,534
		197	—/11,661
		203	—/11,678
		215	—/11,740
		221	—/11,779
		233	—/11,839
		239	—/11,861
		245	—/11,938
		251	—/11,953
		263	—/12,023
		281 with 539 frame	—/12,517
		281 with 536 frame and 41R	—/12,544
	Crew Cab	182	—/11,677
		194	—/11,751
		212	—/11,872
		218	—/11,908
		230	—/11,992
		236	—/12,015

		248	—/12,062
		254	—/12,084
		260	—/12,146
		266	—/12,166

(1) Includes minimum required and standard equipment, water and oil.

(2) Calculated estimates based on engineering component weights — not actual vehicle weights.

Tractor

2019 F-650/ F-750 Super Duty Chassis Cabs

Specs > Dimensions/Weights/Capacities > Total Curb Weights(1)

Series	Cab Style	Wheelbase Range (in.)	Total Curb Weight (lbs.)(2) Gas/Diesel
F-650 Tractor	Regular Cab	146	—/11,062
		158	—/11,147
	SuperCab	167	—/11,324
		179	—/11,504
	Crew Cab	182	—/11,573
F-750 Tractor	Regular Cab	146	—/11,274
		158	—/11,359
	SuperCab	167	—/11,536
		179	—/11,716
	Crew Cab	182	—/11,785

(1) Includes minimum required and standard equipment, water and oil.

(2) Calculated estimates based on engineering component weights — not actual vehicle weights.

F-650 Regular Cab Chassis Cab (158" — 281" WB) — Diesel Engine Models

DRIVE:		F-650 Pro Loader	F-650 Straight Frame
GVWR (lbs.):		20,500/26,000	26,000/29,000
POWERTRAIN:		50-state certified	
Engine	Type	6.7L Power Stroke V8 (270 hp @ 2400 rpm, 675 lb.-ft. Torque @ 1600 rpm, 3200 rpm Governed Speed)	
Transmission	Type	Ford TorqShift Heavy-duty	
	Speeds	6-speed Automatic Overdrive	
Front Axle	Type	Dana I-beam Type	
	Capacity (Rating @ Ground)	8500 lbs.	8500/10,000 lbs.
Rear Axle	Type	Single Reduction, GenTech Quiet Gears, Synthetic Lube and 190 Wheel Ends	
	Capacity (Rating @ Ground)	13,500 lbs.	17,500 lbs.
Driveshaft	Type	SPL-140	SPL-140
BRAKES:			
System	Type	Hydraulic, Split System, with Automatic Adjustment	
Front	Type	15.00" x 1.44" Cast Disc	
Rear	Type	15.00" x 1.44" Cast Disc	
Anti-Lock System		Four-channel	
Parking Brake (Rear Brakes)		12" x 3" Rear Axle-mounted Parking Brake (Bosch) DSSA Type with Lever Control	
ELECTRICAL:			
Alternator	Rating	Denso SC5, 200 Amperes	
Battery	Type	Motorcraft 12-volt Maintenance-free	
	Rating	Dual, 750 CCA (1500 CCA Total)	
	Box Location	Right Side Under Cab	
EXHAUST:	Type	Single Horizontal Aftertreatment Device, Aluminized Steel, Frame-mounted Right Side, Back of Cab	
FUEL TANK:	Capacity	50.0-gallon, Single, LH Rectangular Aluminum	
STEERING:	Type	Integral Power, ZF/Bosch ZN4	
	Ratio	18.9:1 (8500-lbs. FGAWR w/9.5" frame); 18.8:1 (8500-lbs. FGAWR w/8.5" frame); 19.0:1 (10,000-lbs. FGAWR)	
SUSPENSION:			
Frame	Type	Ladder Type Single-channel — Tapered 80,000 psi steel	Ladder Type Single-channel — Straight “C” 50,000 psi steel

	Section Modulus (cu. in.)	10.75	16.98
Shock Absorbers, Front	Type	1.42" Dia. Double-acting	
Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf	
	Rating @ Ground (min.)	8500 lbs.	
Springs, Rear	Type	Multi-leaf	
	Rating @ Ground (min.)	15,500 lbs.	19,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear	
TIRES:			
Front	Type	Hankook AH11	Goodyear Endurance RSA
	Size	245/70R19.5G (14-ply rated)	11R22.5G (14-ply rated)
Rear	Type	Hankook AH11	Goodyear Endurance RSA
	Size	245/70R19.5G (14-ply rated)	11R22.5G (14-ply rated)
WHEELS:			
Front	Type	8-hole Steel Disc, Hub-piloted, Powder-coated White	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	19.5" x 6.75"	22.5" x 7.5"
Rear	Type	8-hole Steel Disc, Hub-piloted, Powder-coated White	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	19.5" x 6.75"	22.5" x 7.5"

Regular Cab Chassis Cab (146", 158" WB) — Diesel Engine Models

DRIVE:		F-650 Tractor	F-750 Tractor
GVWR (lbs.):		27,500/29,000	31,000/37,000
POWERTRAIN:		50-state certified	
Engine	Type	6.7L Power Stroke V8 (270 hp @ 2400 rpm, 675 lb.-ft. Torque @ 1600 rpm, 3200 rpm Governed Speed)	
Transmission	Type	Ford TorqShift Heavy-duty	
	Speeds	6-speed Automatic Overdrive	
Front Axle	Type	Dana I-beam Type	
	Capacity (Rating @ Ground)	10,000 lbs.	
Rear Axle	Type	Single Reduction, GenTech Quiet Gears with 190 Wheel Ends	Single Reduction, Open
	Capacity (Rating @ Ground)	17,500 lbs.	21,000 lbs.
Driveshaft	Type	SPL-140	
BRAKES:			
System	Type	Air brakes, Meritor Q-Plus with ABS and traction control	
Front	Type	15.0" x 4.0"	
Rear	Type	16.5" x 7.0"	
Anti-Lock System		Bendix® Four-channel	
Parking Brake (Rear Brakes)		Mechanical Spring-applied with Air Release	
ELECTRICAL:			
Alternator	Rating	Denso SC5, 200 Amperes	
Battery	Type	Motorcraft 12-volt Maintenance-free	
	Rating	Dual, 750 CCA (1500 CCA Total)	
	Box Location	Right Side Under Cab	
EXHAUST:	Type	Single, Horizontal Muffler, Right-hand, Right Side Under Cab Outside Frame Rail with Rear, Underbody Exit, Switchback-style	
FUEL TANK:	Capacity	50.0-gallon, Single, LH Rectangular Aluminum	
STEERING:	Type	Integral Power, ZF/Bosch ZN4	
	Ratio	19.0:1	
SUSPENSION:			
Frame	Type	Ladder Type, Single-channel 120,000 psi steel	
	Section Modulus (cu. in.)	14.18	
Shock Absorbers, Front	Type	1.42" Dia. Double-acting	

Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf	
	Rating @ Ground (min.)	10,000	
Springs, Rear	Type	Multi-leaf	
	Rating @ Ground (min.)	19,000 lbs.	21,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear	
TIRES:			
Front	Type	Goodyear Endurance RSA	
	Size	11R22.5G (14-ply Rated)	
Rear	Type	Goodyear Endurance RSA	
	Size	11R22.5G (14-ply Rated)	
WHEELS:			
Front	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White	
	Size	22.5" x 7.5"	
Rear	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White	
	Size	22.5" x 7.5"	

Regular Chassis Cab (158" — 281" WB) — Diesel Engine Models

DRIVE:		F-750 Straight Frame
GVWR (lbs.):		31,000/37,000
POWERTRAIN:		50-state certified
Engine	Type	6.7L Power Stroke V8 (270 hp @ 2400 rpm, 675 lb.-ft. Torque @ 1600 rpm, 3200 rpm Governed Speed)
Transmission	Type	Ford TorqShift Heavy-duty
	Speeds	6-speed Automatic Overdrive
Front Axle	Type	Dana I-beam Type
	Capacity (Rating @ Ground)	10,000 lbs.
Rear Axle	Type	Single Reduction, Open
	Capacity (Rating @ Ground)	21,000 lbs.
Driveshaft	Type	SPL-140
BRAKES:		
System	Type	Hydraulic, Split System, Automatic Adjustment
Front	Type	15.00" x 1.44" Cast Disc
Rear	Type	15.00" x 1.44" Cast Disc
Anti-Lock System		Four-channel
Parking Brake (Rear Brakes)		12" x 3" Rear Axle-mounted Parking Brake (Bosch) DSSA Type with Lever Control
ELECTRICAL:		
Alternator	Rating	Denso SC5, 200 Amperes
Battery	Type	Motorcraft 12-volt Maintenance-free
	Rating	Dual, 750 CCA (1500 CCA Total)
	Box Location	Right Side Under Cab
EXHAUST:	Type	Single Horizontal Aftertreatment Device, Aluminized Steel, Frame-mounted Right Side, Back of Cab
FUEL TANK:	Capacity	50.0-gallon, Single, LH Rectangular Aluminum
STEERING:	Type	Integral Power, ZF/Bosch ZN4
	Ratio	19.0:1
SUSPENSION:		
Frame	Type	Ladder Type Single-channel 80,000 psi steel
	Section Modulus (cu. in.)	15.14

Shock Absorbers, Front	Type	1.42" Dia. Double-acting
Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf
	Rating @ Ground (min.)	10,000 lbs.
Springs, Rear	Type	Multi-leaf
	Rating @ Ground (min.)	21,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear
TIRES:		
Front	Type	Goodyear Endurance RSA
	Size	11R22.5G (14-ply rated)
Rear	Type	Goodyear Endurance RSA
	Size	11R22.5G (14-ply rated)
WHEELS:		
Front	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	22.5" x 7.5"
Rear	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	22.5" x 7.5"

F-650 SuperCab Chassis Cab (179" — 281" WB) — Diesel Engine Models

DRIVE:		F-650 Pro Loader	F-650 Straight Frame
GVWR (lbs.):		22,000/26,000	26,000/29,000
POWERTRAIN:		50-state certified	
Engine	Type	6.7L Power Stroke V8 (270 hp @ 2400 rpm, 675 lb.-ft. Torque @ 1600 rpm, 3200 rpm Governed Speed)	
Transmission	Type	Ford TorqShift Heavy-duty	
	Speeds	6-speed Automatic Overdrive	
Front Axle	Type	Dana I-beam Type	
	Capacity (Rating @ Ground)	8500 lbs.	
Rear Axle	Type	Single Reduction, GenTech Quiet Gears, Synthetic Lube and 190 Wheel Ends	
	Capacity (Rating @ Ground)	13,500 lbs.	17,500 lbs.
Driveshaft	Type	SPL-140	SPL-140
BRAKES:			
System	Type	Hydraulic, Split System, Automatic Adjustment	
Front	Type	15.00" x 1.44" Cast Disc	
Rear	Type	15.00" x 1.44" Cast Disc	
Anti-Lock System		Four-channel	
Parking Brake (Rear Brakes)		12" x 3" Rear Axle-mounted Parking Brake (Bosch) DSSA Type with Lever Control	
ELECTRICAL:			
Alternator	Rating	Denso SC5, 200 Amperes	
Battery	Type	Motorcraft 12-volt Maintenance-free	
	Rating	Dual, 750 CCA (1500 CCA Total)	
	Box Location	Right Side Under Cab	
EXHAUST:	Type	Single Horizontal Aftertreatment Device, Aluminized Steel, Frame-mounted Right Side, Back of Cab	
FUEL TANK:	Capacity	65.0-gallon, Single, LH Rectangular Aluminum	
STEERING:	Type	Integral Power, ZF/Bosch ZN4	
	Ratio	18.9:1 (8500-lbs. FGAWR w/9.5" frame); 18.8:1 (8500-lbs. FGAWR w/8.5" frame)	
SUSPENSION:			
Frame	Type	Ladder Type Single-channel — Tapered 80,000 psi steel	Ladder Type Single-channel — Straight “C” 50,000 psi steel
	Section Modulus	10.75	12.64

	(cu. in.)		
Shock Absorbers, Front	Type	1.42" Dia. Double-acting	
Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf	
	Rating @ Ground (min.)	8500 lbs.	
Springs, Rear	Type	Multi-leaf	
	Rating @ Ground (min.)	15,500 lbs.	19,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear	
TIRES:			
Front	Type	Hankook AH11	Goodyear Endurance RSA
	Size	245/70R19.5G (14-ply rated)	11R22.5G (14-ply rated)
Rear	Type	Hankook AH11	Goodyear Endurance RSA
	Size	245/70R19.5G (14-ply rated)	11R22.5G (14-ply rated)
WHEELS:			
Front	Type	8-hole Steel Disc, Hub-piloted, Powder-coated White	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	19.5" x 6.75"	22.5" x 7.5"
Rear	Type	8-hole Steel Disc, Hub-piloted, Powder-coated White	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	19.5" x 6.75"	22.5" x 7.5"

SuperCab Chassis Cab (167", 179" WB) — Diesel Engine Models

DRIVE:		F-650 Tractor	F-750 Tractor
GVWR (lbs.):		27,500/29,000	31,000/37,000
POWERTRAIN:		50-state certified	
Engine	Type	6.7L Power Stroke V8 (270 hp @ 2400 rpm, 675 lb.-ft. Torque @ 1600 rpm, 3200 rpm Governed Speed)	
Transmission	Type	Ford TorqShift Heavy-duty	
	Speeds	6-speed Automatic Overdrive	
Front Axle	Type	Dana I-beam Type	
	Capacity (Rating @ Ground)	10,000 lbs.	
Rear Axle	Type	Single Reduction, GenTech Quiet Gears with 190 Wheel Ends	Single Reduction, Open
	Capacity (Rating @ Ground)	17,500 lbs.	21,000 lbs.
Driveshaft	Type	SPL-140	
BRAKES:			
System	Type	Air Brakes, Meritor Q-Plus with ABS and traction control	
Front	Type	15.0" x 4.0"	
Rear	Type	16.5" x 7.0"	
Anti-Lock System		Bendix® Four-channel	
Parking Brake (Rear Brakes)		Mechanical Spring-applied with Air Release	
ELECTRICAL:			
Alternator	Rating	Denso SC5, 200 Amperes	
Battery	Type	Motorcraft 12-volt Maintenance-free	
	Rating	Dual, 750 CCA (1500 CCA Total)	
	Box Location	Right Side Under Cab	
EXHAUST:	Type	Single, Horizontal Muffler, Right-hand, Right Side Under Cab Outside Frame Rail with Rear, Underbody Exit, Switchback-style	
FUEL TANK:	Capacity	65.0-gallon, Single, LH Rectangular Aluminum	
STEERING:	Type	Integral Power, ZF/Bosch ZN4	
	Ratio	19.0:1	
SUSPENSION:			
Frame	Type	Ladder Type, Single-channel — 120,000 psi steel	
	Section Modulus (cu. in.)	14.18	
Shock Absorbers, Front	Type	1.42" Dia. Double-acting	

Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf	
	Rating @ Ground (min.)	10,000	
Springs, Rear	Type	Multi-leaf (includes 4500-lb. Auxiliary Rubber Spring)	
	Rating @ Ground (min.)	19,000 lbs.	21,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear	
TIRES:			
Front	Type	Goodyear Endurance RSA	
	Size	11R22.5G (14-ply Rated)	
Rear	Type	Goodyear Endurance RSA	
	Size	11R22.5G (14-ply Rated)	
WHEELS:			
Front	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White	
	Size	22.5" x 7.5"	
Rear	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White	
	Size	22.5" x 7.5"	

SuperCab Chassis Cab (167", 179" WB) — Diesel Engine Models

DRIVE:		F-750 Straight Frame
GVWR (lbs.):		31,000/37,000
POWERTRAIN:		50-state certified
Engine	Type	6.7L Power Stroke V8 (270 hp @ 2400 rpm, 675 lb.-ft. Torque @ 1600 rpm, 3200 rpm Governed Speed)
Transmission	Type	Ford TorqShift Heavy-duty
	Speeds	6-speed Automatic Overdrive
Front Axle	Type	Dana I-beam Type
	Capacity (Rating @ Ground)	10,000 lbs.
Rear Axle	Type	Single Reduction, Open
	Capacity (Rating @ Ground)	21,000 lbs.
Driveshaft	Type	SPL-140
BRAKES:		
System	Type	Hydraulic, Split System, Automatic Adjustment
Front	Type	15.00" x 1.44" Cast Disc
Rear	Type	15.00" x 1.44" Cast Disc
Anti-Lock System		Four-channel
Parking Brake (Rear Brakes)		12" x 3" Rear Axle-mounted Parking Brake (Bosch) DSSA Type
ELECTRICAL:		
Alternator	Rating	Denso SC5, 200 Amperes
Battery	Type	Motorcraft 12-volt Maintenance-free
	Rating	Dual, 750 CCA (1500 CCA Total)
	Box Location	Right Side Under Cab
EXHAUST:	Type	Single Horizontal Aftertreatment Device, Aluminized Steel, Frame-mounted Right Side, Back of Cab
FUEL TANK:	Capacity	65.0-gallon, Single, H Rectangular Aluminum
STEERING:	Type	Integral Power, ZF/Bosch ZN4
	Ratio	19.0:1
SUSPENSION:		
Frame	Type	Ladder Type Single-channel 80,000 psi steel
	Section Modulus (cu. in.)	15.14

Shock Absorbers, Front	Type	1.42" Dia. Double-acting
Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf
	Rating @ Ground (min.)	10,000 lbs.
Springs, Rear	Type	Multi-leaf
	Rating @ Ground (min.)	21,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear
TIRES:		
Front	Type	Goodyear Endurance RSA
	Size	11R22.5G (14-ply rated)
Rear	Type	Goodyear Endurance RSA
	Size	11R22.5G (14-ply rated)
WHEELS:		
Front	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	22.5" x 7.5"
Rear	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	22.5" x 7.5"

Crew Cab Chassis Cab (182" — 281" WB) — Diesel Engine Models

DRIVE:		F-650 Pro Loader	F-650 Straight Frame
GVWR (lbs.):		20,500/26,000	26,000/29,000
POWERTRAIN:		50-state certified	
Engine	Type	6.7L Power Stroke V8 (270 hp @ 2400 rpm, 675 lb.-ft. Torque @ 1600 rpm, 3200 rpm Governed Speed)	
Transmission	Type	Ford TorqShift Heavy-duty	
	Speeds	6-speed Automatic Overdrive	
Front Axle	Type	Dana I-beam Type	
	Capacity (Rating @ Ground)	8500 lbs.	
Rear Axle	Type	Single Reduction, GenTech Quiet Gears, Synthetic Lube and 190 Wheel Ends	
	Capacity (Rating @ Ground)	13,500 lbs.	17,500 lbs.
Driveshaft	Type	SPL-140	SPL-140
BRAKES:			
System	Type	Hydraulic, Split System, Automatic Adjustment	
Front	Type	15.00" x 1.44" Cast Disc	
Rear	Type	15.00" x 1.44" Cast Disc	
Anti-Lock System		Four-channel	
Parking Brake (Rear Brakes)		12" x 3" Rear Axle-mounted Parking Brake (Bosch) DSSA Type with Lever Control	
ELECTRICAL:			
Alternator	Rating	Denso SC5, 200 Amperes	
Battery	Type	Motorcraft 12-volt Maintenance-free	
	Rating	Dual, 750 CCA (1500 CCA Total)	
	Box Location	Right Side Under Cab	
EXHAUST:	Type	Single Horizontal Aftertreatment Device, Aluminized Steel, Frame-mounted Right Side, Back of Cab	
FUEL TANK:	Capacity	65.0-gallon, Single, LH Rectangular Aluminum	
STEERING:	Type	Integral Power, ZF/Bosch ZN4	
	Ratio	18.8:1 (8500-lbs. FGAWR w/8.5" frame); 18.9:1 (8500-lbs. FGAWR w/9.5" frame)	
SUSPENSION:			
Frame	Type	Ladder Type Single-channel — Tapered 80,000 psi steel	Ladder Type Single-channel — Straight “C” 50,000 psi steel
	Section Modulus	10.75	12.64

	(cu. in.)		
Shock Absorbers, Front	Type	1.42" Dia. Double-acting	
Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf	
	Rating @ Ground (min.)	8500 lbs.	
Springs, Rear	Type	Multi-leaf	
	Rating @ Ground (min.)	15,500 lbs.	19,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear	
TIRES:			
Front	Type	Hankook AH11	Goodyear Endurance RSA
	Size	245/70R19.5G (14-ply rated)	11R22.5G (14-ply rated)
Rear	Type	Hankook AH11	Goodyear Endurance RSA
	Size	245/70R19.5G (14-ply rated)	11R22.5G (14-ply rated)
WHEELS:			
Front	Type	8-hole Steel Disc, Hub-piloted, Powder-coated White	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	19.5" x 6.75"	22.5" x 7.5"
Rear	Type	8-hole Steel Disc, Hub-piloted, Powder-coated White	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	19.5" x 6.75"	22.5" x 7.5"

Crew Cab Chassis Cab (182" WB) — Diesel Engine Models

DRIVE:		F-650 Tractor	F-750 Tractor
GVWR (lbs.):		27,500/29,000	31,000/37,000
POWERTRAIN:		50-state certified	
Engine	Type	6.7L Power Stroke V8 (270 hp @ 2400 rpm, 675 lb.-ft. Torque @ 1600 rpm, 3200 rpm Governed Speed)	
Transmission	Type	Ford TorqShift Heavy-duty	
	Speeds	6-speed Automatic Overdrive	
Front Axle	Type	Dana I-beam Type	
	Capacity (Rating @ Ground)	10,000 lbs.	
Rear Axle	Type	Single Reduction, GenTech Quiet Gears with 190 Wheel Ends	Single Reduction, Open
	Capacity (Rating @ Ground)	17,500 lbs.	21,000 lbs.
Driveshaft	Type	SPL-140	
BRAKES:			
System	Type	Air Brakes, Meritor Q-Plus with ABS and traction control	
Front	Type	15.0" x 4.0"	
Rear	Type	16.5" x 7.0"	
Anti-Lock System		Bendix® Four-channel	
Parking Brake (Rear Brakes)		Mechanical Spring-applied with Air Release	
ELECTRICAL:			
Alternator	Rating	Denso SC5, 200 Amperes	
Battery	Type	Motorcraft 12-volt Maintenance-free	
	Rating	Dual, 750 CCA (1500 CCA Total)	
	Box Location	Right Side Under Cab	
EXHAUST:	Type	Single, Horizontal Muffler, Right-hand, Right Side Under Cab Outside Frame Rail with Rear, Underbody Exit, Switchback-style	
FUEL TANK:	Capacity	65.0-gallon, Single, LH Rectangular Aluminum	
STEERING:	Type	Integral Power, ZF/Bosch ZN4	
	Ratio	19.0:1	
SUSPENSION:			
Frame	Type	Ladder Type, Single-channel 120,000 psi steel	
	Section Modulus (cu. in.)	14.18	
Shock Absorbers, Front	Type	1.42" Dia. Double-acting	

Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf	
	Rating @ Ground (min.)	10,000	
Springs, Rear	Type	Multi-leaf	
	Rating @ Ground (min.)	19,000 lbs.	21,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear	
TIRES:			
Front	Type	Goodyear Endurance RSA	
	Size	11R22.5G (14-ply Rated)	
Rear	Type	Goodyear Endurance RSA	
	Size	11R22.5G (14-ply Rated)	
WHEELS:			
Front	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White	
	Size	22.5" x 7.5"	
Rear	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White	
	Size	22.5" x 7.5"	

Crew Cab Chassis Cab (182" — 266" WB) — Diesel Engine Models

2019 F-650/ F-750 Super Duty Chassis Cabs

DRIVE:		F-750 Straight Frame
GVWR (lbs.):		31,000/37,000
POWERTRAIN:		50-state certified
Engine	Type	6.7L Power Stroke V8 (270 hp @ 2400 rpm, 675 lb.-ft. Torque @ 1600 rpm, 3200 rpm Governed Speed)
Transmission	Type	Ford TorqShift Heavy-duty
	Speeds	6-speed Automatic Overdrive
Front Axle	Type	Dana I-beam Type
	Capacity (Rating @ Ground)	10,000 lbs.
Rear Axle	Type	Single Reduction, Open
	Capacity (Rating @ Ground)	21,000 lbs.
Driveshaft	Type	SPL-140
BRAKES:		
System	Type	Hydraulic, Split System, Automatic Adjustment
Front	Type	15.00" x 1.44" Cast Disc
Rear	Type	15.00" x 1.44" Cast Disc
Anti-Lock System		Four-channel
Parking Brake (Rear Brakes)		12" x 3" Rear Axle-mounted Parking Brake (Bosch) DSSA Type
ELECTRICAL:		
Alternator	Rating	Denso SC5, 200 Amperes
Battery	Type	Motorcraft 12-volt Maintenance-free
	Rating	Dual, 750 CCA (1500 CCA Total)
	Box Location	Right Side Under Cab
EXHAUST:	Type	Single Horizontal Aftertreatment Device, Aluminized Steel, Frame-mounted Right Side, Back of Cab
FUEL TANK:	Capacity	65.0-gallon, Single, LH Rectangular Aluminum
STEERING:	Type	Integral Power, ZF/Bosch ZN4
	Ratio	19.0:1
SUSPENSION:		
Frame	Type	Ladder Type Single-channel 80,000 psi steel
	Section Modulus	15.14

	(cu. in.)	
Shock Absorbers, Front	Type	1.42" Dia. Double-acting
Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf
	Rating @ Ground (min.)	10,000 lbs.
Springs, Rear	Type	Multi-leaf
	Rating @ Ground (min.)	21,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear
TIRES:		
Front	Type	Goodyear Endurance RSA
	Size	11R22.5G (14-ply rated)
Rear	Type	Goodyear Endurance RSA
	Size	11R22.5G (14-ply rated)
WHEELS:		
Front	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	22.5" x 7.5"
Rear	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	22.5" x 7.5"

F-650 Regular Cab Chassis Cab (158" — 281" WB) — Gas Engine Models

DRIVE:		F-650 Pro Loader	F-650 Straight Frame
GVWR (lbs.):		22,000/26,000	26,000/29,000
POWERTRAIN:		50-state certified	
Engine	Type	Ford 6.8L SEFI V10 (320 hp @ 3900 rpm, 460 lb.-ft. of Torque @ 3000 rpm)	
Transmission	Type	Ford TorqShift Heavy-duty	
	Speeds	6-speed Automatic Overdrive	
Front Axle	Type	Dana I-beam Type	
	Capacity (Rating @ Ground)	8500 lbs.	8500/10,000 (optional) lbs.
Rear Axle	Type	Single Reduction, GenTech Quiet Gears, Synthetic Lube and 190 Wheel Ends	
	Capacity (Rating @ Ground)	13,500 lbs.	17,500 lbs.
Driveshaft	Type	SPL-100	SPL-100
BRAKES:			
System	Type	Hydraulic, Split System, Automatic Adjustment	
Front	Type	15.00" x 1.44" Cast Disc	
Rear	Type	15.00" x 1.44" Cast Disc	
Anti-Lock System		Four-channel	
Parking Brake (Rear Brakes)		12" x 3" Rear Axle-mounted Parking Brake (Bosch) DSSA Type with Lever Control	
ELECTRICAL:			
Alternator	Rating	Mitsubishi, 175 Amperes	
Battery	Type	Motorcraft 12-volt Maintenance-free	
	Rating	900 CCA	
	Box Location	Right Side Under Cab	
EXHAUST:	Type	Single Horizontal Muffler, Catalytic Converter, Frame-mounted Right Side, Back of Cab, Downward-facing Outlet Tip, Stainless Steel Construction	
FUEL TANK:	Capacity	50.0-gallon, Single, LH Rectangular Steel	
STEERING:	Type	Integral Power, ZF/Bosch ZN4	
	Ratio	18.8:1 (8500-lbs. FGAWR w/8.5" frame); 18.9:1 (8500-lbs. FGAWR w/9.5" frame); 19.0:1 (10,000-lbs. FGAWR)	
SUSPENSION:			
Frame	Type	Ladder Type Single-channel — Tapered 80,000 psi steel	Ladder Type Single-channel — Straight “C” 50,000 psi steel
	Section Modulus	10.75	12.64

	(cu. in.)		
Shock Absorbers, Front	Type	1.42" Dia. Double-acting	
Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf	
	Rating @ Ground (min.)	8500 lbs.	
Springs, Rear	Type	Multi-leaf	
	Rating @ Ground (min.)	15,500 lbs.	19,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear	
TIRES:			
Front	Type	Hankook AH11	Goodyear Endurance RSA
	Size	245/70R19.5G (14-ply rated)	11R22.5G (14-ply rated)
Rear	Type	Hankook AH11	Goodyear Endurance RSA
	Size	245/70R19.5G (14-ply rated)	11R22.5G (14-ply rated)
WHEELS:			
Front	Type	8-hole Steel Disc, Hub-piloted, Powder-coated White	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	19.5" x 6.75"	22.5" x 7.5"
Rear	Type	8-hole Steel Disc, Hub-piloted, Powder-coated White	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	19.5" x 6.75"	22.5" x 7.5"

F-750 Regular Cab Chassis Cab (158" — 281" WB) — Gas Engine Models

DRIVE:		F-750 Straight Frame
GVWR (lbs.):		30,200/33,000
POWERTRAIN:		50-state certified
Engine	Type	Ford 6.8L SEFI V10 (320 hp @ 3900 rpm, 460 lb.-ft. Torque @ 3000 rpm)
Transmission	Type	Ford TorqShift Heavy-duty
	Speeds	6-speed Automatic Overdrive
Front Axle	Type	Dana I-beam Type
	Capacity (Rating @ Ground)	10,000 lbs.
Rear Axle	Type	Single Reduction, Open
	Capacity (Rating @ Ground)	21,000 lbs.
Driveshaft	Type	SPL-100
BRAKES:		
System	Type	Hydraulic, Split System, Automatic Adjustment
Front	Type	15.00" x 1.44" Cast Disc
Rear	Type	15.00" x 1.44" Cast Disc
Anti-Lock System		Four-channel
Parking Brake (Rear Brakes)		12" x 3" Rear Axle-mounted Parking Brake (Bosch) DSSA Type with Lever Control
ELECTRICAL:		
Alternator	Rating	Mitsubishi, 175 Amperes
Battery	Type	Motorcraft 12-volt Maintenance-free
	Rating	900 CCA
	Box Location	Right Side Under Cab
EXHAUST:	Type	Single Horizontal Muffler, Catalytic Converter, Frame-mounted Right Side, Back of Cab, Downward-facing Outlet Tip, Stainless Steel Construction
FUEL TANK:	Capacity	50.0-gallon, Single, LH Rectangular Steel
STEERING:	Type	Integral Power, ZF/Bosch ZN4
	Ratio	19.0:1
SUSPENSION:		
Frame	Type	Ladder Type, Single-channel 80,000 psi steel
	Section Modulus (cu. in.)	15.14
Shock Absorbers,	Type	1.42" Dia. Double-acting

Front		
Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf
	Rating @ Ground (min.)	10,000
Springs, Rear	Type	Multi-leaf
	Rating @ Ground (min.)	21,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear
TIRES:		
Front	Type	Goodyear Endurance RSA
	Size	11R22.5G (14-ply rated)
Rear	Type	Goodyear Endurance RSA
	Size	11R22.5G (14-ply rated)
WHEELS:		
Front	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	22.5" x 7.5"
Rear	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	22.5" x 7.5"

SuperCab Chassis Cab (179" — 281" WB) — Gas Engine Models

DRIVE:		F-650 Pro Loader	F-650 Straight Frame
GVWR (lbs.):		22,000/26,000	25,600/29,000
POWERTRAIN:		50-state certified	
Engine	Type	Ford 6.8L SEFI V10 (320 hp @ 3900 rpm, 460 lb.-ft. of Torque @ 3000 rpm)	
Transmission	Type	Ford TorqShift Heavy-duty	
	Speeds	6-speed Automatic Overdrive	
Front Axle	Type	Dana I-beam Type	
	Capacity (Rating @ Ground)	8500 lbs.	
Rear Axle	Type	Single Reduction, GenTech Quiet Gears, Synthetic Lube and 190 Wheel Ends	
	Capacity (Rating @ Ground)	13,500 lbs.	17,500 lbs.
Driveshaft	Type	SPL-100	SPL-100
BRAKES:			
System	Type	Hydraulic, Split System, Automatic Adjustment	
Front	Type	15.00" x 1.44" Cast Disc	
Rear	Type	15.00" x 1.44" Cast Disc	
Anti-Lock System		Four-channel	
Parking Brake (Rear Brakes)		12" x 3" Rear Axle-mounted Parking Brake (Bosch) DSSA Type with Lever Control	
ELECTRICAL:			
Alternator	Rating	Mitsubishi, 175 Amperes	
Battery	Type	Motorcraft 12-volt Maintenance-free	
	Rating	900 CCA	
	Box Location	Right Side Under Cab	
EXHAUST:	Type	Single Horizontal Muffler, Catalytic Converter, Frame-mounted Right Side, Back of Cab, Downward-facing Outlet Tip, Stainless Steel Construction	
FUEL TANK:	Capacity	50.0-gallon, Single, LH Rectangular Steel	
STEERING:	Type	Integral Power, ZF/Bosch ZN4	
	Ratio	18.8:1 (w/8.5" frame); 18.9:1 (w/9.5" frame)	
SUSPENSION:			
Frame	Type	Ladder Type Single-channel — Tapered 80,000 psi steel	Ladder Type Single-channel — Straight "C" 50,000 psi steel
	Section Modulus (cu. in.)	10.75	12.64
Shock	Type	1.42" Dia. Double-acting	

Absorbers, Front			
Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf	
	Rating @ Ground (min.)	8500 lbs.	
Springs, Rear	Type	Multi-leaf	
	Rating @ Ground (min.)	15,500 lbs.	19,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear	
TIRES:			
Front	Type	Hankook AH11	Goodyear Endurance RSA
	Size	245/70R19.5G (14-ply rated)	11R22.5G (14-ply rated)
Rear	Type	Hankook AH11	Goodyear Endurance RSA
	Size	245/70R19.5G (14-ply rated)	11R22.5G (14-ply rated)
WHEELS:			
Front	Type	8-hole Steel Disc, Hub-piloted, Powder-coated White	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	19.5" x 6.75"	22.5" x 7.5"
Rear	Type	8-hole Steel Disc, Hub-piloted, Powder-coated White	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	19.5" x 6.75"	22.5" x 7.5"

F-750 SuperCab Chassis Cab (179" — 281" WB) — Gas Engine Models

DRIVE:		F-750 Straight Frame
GVWR (lbs.):		30,200/33,000
POWERTRAIN:		50-state certified
Engine	Type	Ford 6.8L SEFI V10 (320 hp @ 3900 rpm, 460 lb.-ft. Torque @ 3000 rpm)
Transmission	Type	Ford TorqShift Heavy-duty
	Speeds	6-speed Automatic Overdrive
Front Axle	Type	Dana I-beam Type
	Capacity (Rating @ Ground)	10,000 lbs.
Rear Axle	Type	Single Reduction, Open
	Capacity (Rating @ Ground)	21,000 lbs.
Driveshaft	Type	SPL-100
BRAKES:		
System	Type	Hydraulic, Split System, Automatic Adjustment
Front	Type	15.00" x 1.44" Cast Disc
Rear	Type	15.00" x 1.44" Cast Disc
Anti-Lock System		Four-channel
Parking Brake (Rear Brakes)		12" x 3" Rear Axle-mounted Parking Brake (Bosch) DSSA Type with Lever Control
ELECTRICAL:		
Alternator	Rating	Mitsubishi, 175 Amperes
Battery	Type	Motorcraft 12-volt Maintenance-free
	Rating	900 CCA
	Box Location	Right Side Under Cab
EXHAUST:	Type	Single Horizontal Muffler, Catalytic Converter, Frame-mounted Right Side, Back of Cab, Downward-facing Outlet Tip, Stainless Steel Construction
FUEL TANK:	Capacity	50.0-gallon, Single, LH Rectangular Steel
STEERING:	Type	Integral Power, ZF/Bosch ZN4
	Ratio	19.0:1
SUSPENSION:		
Frame	Type	Ladder Type, Single-channel 80,000 psi steel
	Section Modulus (cu. in.)	15.14
Shock Absorbers, Front	Type	1.42" Dia. Double-acting

Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf
	Rating @ Ground (min.)	10,000
Springs, Rear	Type	Multi-leaf
	Rating @ Ground (min.)	21,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear
TIRES:		
Front	Type	Goodyear Endurance RSA
	Size	11R22.5G (14-ply Rated)
Rear	Type	Goodyear Endurance RSA
	Size	11R22.5G (14-ply Rated)
WHEELS:		
Front	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	22.5" x 7.5"
Rear	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	22.5" x 7.5"

F-650 Crew Cab Chassis Cab (182" — 278" WB) — Gas Engine Models

DRIVE:		F-650 Pro Loader	F-650 Straight Frame
GVWR (lbs.):		22,000/26,000	26,000/29,000
POWERTRAIN:		50-state certified	
Engine	Type	Ford 6.8L SEFI V10 (320 hp @ 3900 rpm, 460 lb.-ft. of Torque @ 3000 rpm)	
Transmission	Type	Ford TorqShift Heavy-duty	
	Speeds	6-speed Automatic Overdrive	
Front Axle	Type	Dana I-beam Type	
	Capacity (Rating @ Ground)	8500 lbs.	
Rear Axle	Type	Single Reduction, GenTech Quiet Gears, Synthetic Lube and 190 Wheel Ends	
	Capacity (Rating @ Ground)	13,500 lbs.	17,500 lbs.
Driveshaft	Type	SPL-100	SPL-100
BRAKES:			
System	Type	Hydraulic, Split System, Automatic Adjustment	
Front	Type	15.00" x 1.44" Cast Disc	
Rear	Type	15.00" x 1.44" Cast Disc	
Anti-Lock System		Four-channel	
Parking Brake (Rear Brakes)		12" x 3" Rear Axle-mounted Parking Brake (Bosch) DSSA Type with Lever Control	
ELECTRICAL:			
Alternator	Rating	Mitsubishi, 175 Amperes	
Battery	Type	Motorcraft 12-volt Maintenance-free	
	Rating	900 CCA	
	Box Location	Right Side Under Cab	
EXHAUST:	Type	Single Horizontal Muffler, Catalytic Converter, Frame-mounted Right Side, Back of Cab, Downward-facing Outlet Tip, Stainless Steel Construction	
FUEL TANK:	Capacity	60.0-gallon, Single, LH Rectangular Steel	
STEERING:	Type	Integral Power, ZF/Bosch ZN4	
	Ratio	18.8:1 (w/8.5" frame); 18.9:1 (w/9.5" frame)	
SUSPENSION:			
Frame	Type	Ladder Type Single-channel — Tapered 80,000 psi steel	Ladder Type Single-channel — Straight “C” 50,000 psi steel
	Section Modulus (cu. in.)	10.75	12.64
Shock	Type	1.42" Dia. Double-acting	

Absorbers, Front			
Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf	
	Rating @ Ground (min.)	8500 lbs.	
Springs, Rear	Type	Multi-leaf	
	Rating @ Ground (min.)	15,500 lbs.	19,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear	
TIRES:			
Front	Type	Hankook AH11	Goodyear Endurance RSA
	Size	245/70R19.5G (14-ply rated)	11R22.5G (14-ply rated)
Rear	Type	Hankook AH11	Goodyear Endurance RSA
	Size	245/70R19.5G (14-ply rated)	11R22.5G (14-ply rated)
WHEELS:			
Front	Type	8-hole Steel Disc, Hub-piloted, Powder-coated White	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	19.5" x 6.75"	22.5" x 7.5"
Rear	Type	8-hole Steel Disc, Hub-piloted, Powder-coated White	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	19.5" x 6.75"	22.5" x 7.5"

F-750 Crew Cab Chassis Cab (182" — 266" WB) — Gas Engine Models

DRIVE:		F-750 Straight Frame
GVWR (lbs.):		30,200/33,000
POWERTRAIN:		50-state certified
Engine	Type	Ford 6.8L SEFI V10 (320 hp @ 3900 rpm, 460 lb.-ft. Torque @ 3000 rpm)
Transmission	Type	Ford TorqShift Heavy-duty
	Speeds	6-speed Automatic Overdrive
Front Axle	Type	Dana I-beam Type
	Capacity (Rating @ Ground)	10,000 lbs.
Rear Axle	Type	Single Reduction, Open
	Capacity (Rating @ Ground)	21,000 lbs.
Driveshaft	Type	SPL-100
BRAKES:		
System	Type	Hydraulic, Split System, Automatic Adjustment
Front	Type	15.00" x 1.44" Cast Disc
Rear	Type	15.00" x 1.44" Cast Disc
Anti-Lock System		Four-channel
Parking Brake (Rear Brakes)		12" x 3" Rear Axle-mounted Parking Brake (Bosch) DSSA Type with Lever Control
ELECTRICAL:		
Alternator	Rating	Mitsubishi, 175 Amperes
Battery	Type	Motorcraft 12-volt Maintenance-free
	Rating	900 CCA
	Box Location	Right Side Under Cab
EXHAUST:	Type	Single Horizontal Muffler, Catalytic Converter, Frame-mounted Right Side, Back of Cab, Downward-facing Outlet Tip, Stainless Steel Construction
FUEL TANK:	Capacity	60.0-gallon, Single, LH Rectangular Steel
STEERING:	Type	Integral Power, ZF/Bosch ZN4
	Ratio	19.0:1
SUSPENSION:		
Frame	Type	Ladder Type, Single-channel 80,000 psi steel
	Section Modulus (cu. in.)	15.14
Shock Absorbers, Front	Type	1.42" Dia. Double-acting

Springs, Front	Type	3.15" x 62" Parabolic Taper-leaf
	Rating @ Ground (min.)	10,000
Springs, Rear	Type	Multi-leaf
	Rating @ Ground (min.)	21,000 lbs.
WHEEL SEALS:	Type	Stemco Front and Rear
TIRES:		
Front	Type	Goodyear Endurance RSA
	Size	11R22.5G (14-ply rated)
Rear	Type	Goodyear Endurance RSA
	Size	11R22.5G (14-ply rated)
WHEELS:		
Front	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	22.5" x 7.5"
Rear	Type	10-hole Steel Disc, Hub-piloted, Powder-coated White
	Size	22.5" x 7.5"

Engine

2019 F-650/ F-750 Super Duty Chassis Cabs

Specs > Powertrain

Driveline Layout	Front engine, rear wheel (RWD)	
Engine Type	**6.8L SEFI V10 Gas**	**6.7L Power Stroke V8 Turbo Diesel**
Displacement (liters/cu. in.)	6.8/415	6.7/406
Horsepower (@ rpm)	320 @ 3900	270 @ 2400 300 @ 2500 330 @ 2600
Torque (lb.-ft. @ rpm)	460 @ 3000	675 @ 1600 700 @ 1800 725 @ 1800
Compression Ratio	9.2:1	16.2:1
Valvetrain	SOHC	OHV
Valve Operation	Roller rocker shaft	Push rod/rocker arms
Bore & Stroke (in.)	3.55 x 4.17	3.90 x 4.25
Main bearings	6	5
Induction	Naturally aspirated	Single turbocharged
Fuel System	Sequential multiport	Direct-injection
Fuel Requirement (octane)	87 (min.)	ULSD Diesel/B20 biodiesel

2019 F-650/ F-750 Super Duty Chassis Cabs

Automatic Transmission Specifications

Specs > Powertrain

Make/Type	Ford TorqShift Heavy-duty 6-speed Automatic
Torque Capacity (lb.-ft.) Net	
Ratios (to 1):	
1st	3.97
2nd	2.31
3rd	1.51
4th	1.14
5th	0.85
6th	0.67
Reverse	3.12
Gears — Type	
Fluid Capacity (qts.)	Diesel: 16.3 Gas: 17.4
Oil System	Sump
Filter	Internal High-efficiency
Power Takeoff (PTO) Provision Data:	
Opening	SAE 6-bolt LH
Gear Ratio	1.00:1
Torque Rating	Diesel Stationary Mode: 300 lb.-ft. Diesel Mobile Mode: 200 lb.-ft. Gas Stationary Mode: 250 lb.-ft. Gas Mobile Mode: 125 lb.-ft.

2019 F-650/ F-750 Super Duty Chassis Cabs

Cooling System Specifications

Specs > Powertrain

Engine	Trans.	Radiator Area (sq. in.)	Core Thickness (in.)	Total Number of Tubes	Fins Per Inch	System Capacity Qts. (liters)	Fan Blades	Blade Dia. (in.)	Clutch Type
6.7L HT	Ford	993	1.65	88	15	35.1 (33.2)	9	26.0	Viscous
6.7L LT	Ford	832	2.17	66	18.5	15.3 (14.5)	NA	NA	NA
6.8L	Ford	993	1.65	88	15	28.8 (27.3)	8	20.0	Viscous

2019 F-650/ F-750 Super Duty Chassis Cabs

Air Conditioning Specifications

Specs > Powertrain

Make	Refrigerant	Compressor	Condenser Location	Evaporator Location
Ford	R-134A	HVCC	Radiator-mounted	RH Under Instrument Panel

2019 F-650/ F-750 Super Duty Chassis Cabs

Heater and Defroster Specifications

Specs > Powertrain

Make	Blower Motor	Heater Core Location	Air Intake	Water Shutoff to Heat
Ford	7-speed, Wired to Ignition	In-cab, RH Side	Fresh Air; Top of Cowl	None

2019 F-650/ F-750 Super Duty Chassis Cabs

Fuel System Data

Specs > Powertrain

Engine	Injection Method	Fuel Pump/Location	Fuel Filter/Location	Air Cleaner
Ford 6.7L	Direct, High-pressure Pump	Mechanical/Engine-mounted	Spin-on/Cylinder Head	Dry Type
Ford 6.8L	SEFI	Fuel Tank	In-tank	Dry Type

2019 F-650/ F-750 Super Duty Chassis Cabs

Universal Joint Driveshaft Specifications

Specs > Powertrain

Transmission	U-joint/Driveshaft
Ford	SPL-100 (Gasoline and Diesel)
Ford	SPL-140 (Diesel Only)

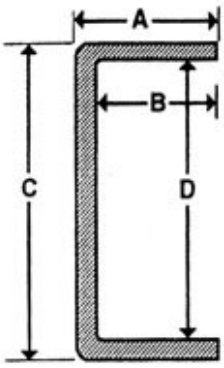
2019 F-650/ F-750 Super Duty Chassis Cabs

Frame Strength Considerations

In considering frame strength, three major design criteria must be evaluated in order to make a correct frame selection.

1. The shape and dimensional characteristics (cross-section) of the frame. (Section Modulus)
2. The characteristics of the material used in construction of the frame. (Yield Strength)
3. The overall result of the shape, dimensional and material characteristics. (Resisting Bending Moment)

These three areas are discussed next with some important definitions.



$t = A–B = \frac{C–D}{2}$ = Flange Thickness

$SM = \frac{AC^3 – BD^3}{6C}$ = Section Modulus

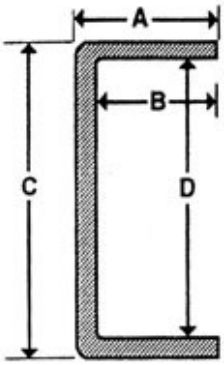
RBM = Yield Strength x SM

1. Shape and Dimensional Characteristics

2019 F-650/ F-750 Super Duty Chassis Cabs

SM (Section Modulus) — A measure of frame strength and rigidity determined by the shape, thickness, flange width and depth of the side rails and reinforcements, if used (see figure).

Section Modulus is expressed in cubic inches (cu. in.). In comparing frames made of the same material, the frame with the greatest Section Modulus is the strongest.



$t = A–B = \frac{C–D}{2}$ = Flange Thickness

$SM = \frac{AC^3 – BD^3}{6C}$ = Section Modulus

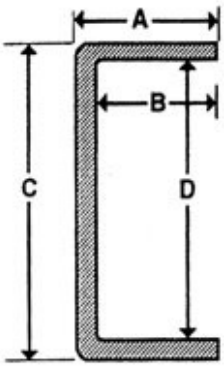
RBM = Yield Strength x SM

2. Material Characteristics

Yield Strength — The maximum load that can be applied to a material before permanent deformation occurs.

This means, in effect, the maximum load that will allow the material to return to its original shape after the load is removed. The Yield Strength of frames — expressed in pounds per square inch (psi) — is a characteristic of the materials used in their construction, e.g., carbon steel, high-tensile steel, etc.

Since Yield Strength is a measurement of the material characteristics, it is an assigned number that can be retrieved from a table. Typical frame Yield Strength ranges from 50,000 to 125,000 psi.



$t = A–B = \frac{C–D}{2}$ = Flange Thickness

$SM = \frac{AC^3 – BD^3}{6C}$ = Section Modulus

RBM = Yield Strength x SM

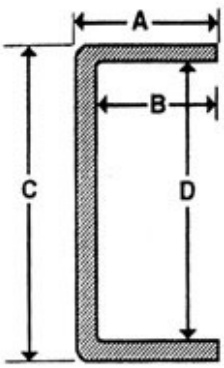
3. Combination of Shape, Dimensional and Material Characteristics

2019 F-650/ F-750 Super Duty Chassis Cabs

RBM (Resisting Bending Moment) — The maximum bending moment that a particular frame configuration can support without permanent deformation or failure.

It is a calculated value used to compare frames of differing composition and Section Modulus. It is obtained by multiplying Section Modulus by Yield Strength and is expressed in inch-pounds (in.-lbs.). In comparing frames made of unlike materials, the frame with the highest RBM has the most strength.

It should be noted that when a frame is constructed of two different materials, the lower Yield Strength is used to compute RBM.



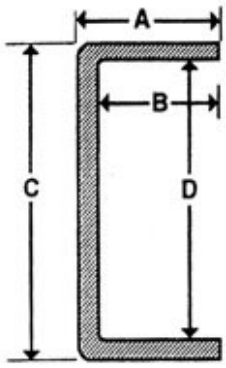
$t = A–B = \frac{C–D}{2}$ = Flange Thickness

$SM = \frac{AC^3 – BD^3}{6C}$ = Section Modulus

RBM = Yield Strength x SM

Computing Frame Strength

The formulas for Flange Thickness, Section Modulus and Resisting Bending Moment for a full “C” channel are to the right.



$$t = A–B = \frac{C–D}{2} = \text{Flange Thickness}$$

$$SM = \frac{AC^3 – BD^3}{6C} = \text{Section Modulus}$$

RBM = Yield Strength x SM

Dimensions Affecting Strength and Resisting Bending Moment

Section Modulus (SM) is not the complete measure of frame strength. Yield Strength of the material also needs to be factored in.

- Ford steel frames come in a variety of Yield Strengths ranging from 50,000 to 120,000 psi
- High-tensile strength frames (120,000 psi) are available to provide load support for more demanding applications without adding the additional weight of a reinforcement
- In some cases, the use of thicker, bulkier double-channel frames may interfere with the “packaging” of other equipment or components
- Remember that to obtain the overall measure of frame strength, it is necessary to multiply the Section Modulus by the Yield Strength. The resulting value, expressed in inch-pounds (in.-lbs.), is the Resisting Bending Moment (RBM). RBM is the best measure of comparing overall strength between different frames
- Frames need to be strongest where stress is concentrated. For example, in highway tractors this is typically near the centerline of the rear axle, or trunnion for tandem axle trucks, while in dump trucks it is just behind the cab
- Normally, stresses are much less at the ends of the frame compared to the span between front and rear axles
- This is why variable-depth frames are the correct choice for many applications; the frame is strong where it needs to be strong without needlessly adding cost and weight

2019 F-650/ F-750 Super Duty Chassis Cabs

Frame Rail Specifications

Specs > Chassis

Code	Type	Side Rail Dimensions (in.)			Material (Notes)	Yield Strength (psi)	Nominal Section Modulus (cu. in.)	Nominal Resisting Bending Moment (in.-lbs.)	GVWR Max. (lbs.)
		Depth	Width	Thickness					
534	Straight-channel Side Rail	10.125	3.062	0.312	A	50,000	12.64	632,000	29,000
537	Straight-channel Side Rail with Kick-up at Rear Suspension Rearward(1)	9.125	3.062	0.312	A	80,000	10.75	860,000	26,000
533	Straight-channel Side Rail	9.125	3.062	0.312	A	80,000	10.75	860,000	29,000
535	Straight-channel Side Rail	10.250	3.092	0.375	A	80,000	15.14	1,211,000	29,000 — 37,000
536	Straight-channel Side Rail	10.125	3.580	0.312	B	120,000	14.18	1,702,000	29,000 — 37,000
538	Straight-channel Side Rail	10.250	3.61	0.375	B	120,000	16.98	2,038,000	31,000 — 37,000
539	Straight-channel Side Rail	10.375	3.705	0.438	B	120,000	20.11	2,413,000	37,000
41R	Straight-channel Side Rail — Full-channel Outer "C" Channel Reinforcement	10.813	3.892	0.312	B	120,000	29.20(2)	3,504,000	37,000

(1) Kick-up rail section is 6.50" in depth.

(2) Section modulus value included base frame rail, code 536.

Notes:

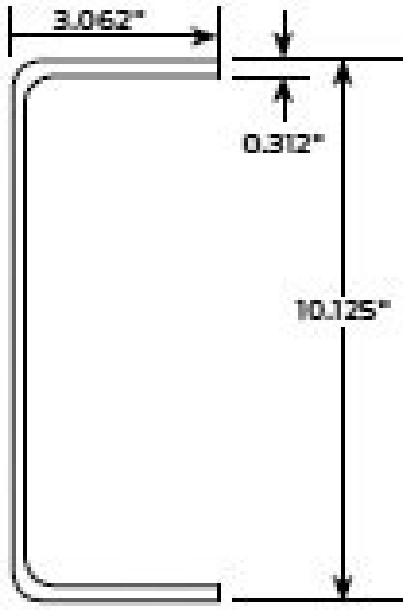
A = High-strengh, low-alloy steel

B = Heat-treated alloy steel

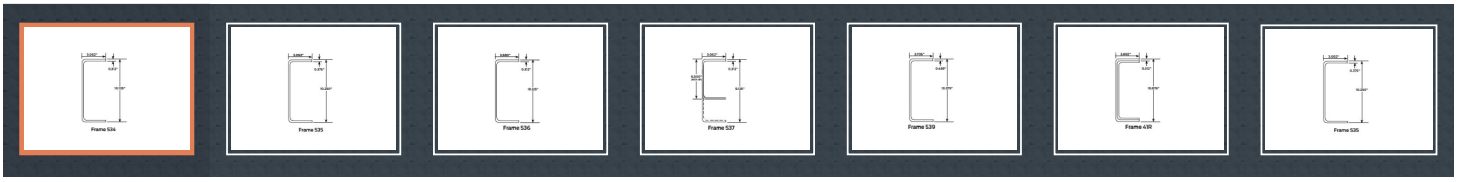
NOTE: For product features, please see Models & Packages and/or the Dealer Ordering Guide for availability.

2019 F-650/ F-750 Super Duty Chassis Cabs

Frame Rail Cross Sections



Frame 534



2019 F-650/ F-750 Super Duty Chassis Cabs

Front Axle Specifications

Specs > Chassis

Regular/Super/Crew Cab Chassis Model		43A	43B	43C	43D
Manufacturer T.Obj: 29		Dana/Spicer®	Dana/Spicer	Dana/Spicer	Dana/Spicer
Max. Rating @ Ground (lbs.)		8500	10,000	12,000	14,000
Axle	Type	I-beam w/Kingpin Spindles	I-beam w/Kingpin Spindles	I-beam w/Kingpin Spindles	I-beam w/Kingpin Spindles
	Material	Forged Steel	Forged Steel	Forged Steel	Forged Steel
	Spring Centers (in.)	35.0	35.0	35.0	35.0
Kingpins	Bushing Material	Bronze	Bronze	Bronze	Bronze
Spindle	Material	Steel	Steel	Steel	Steel
Wheel Bearings	Type	Tapered Roller	Tapered Roller	Tapered Roller	Tapered Roller

Rear Axle Specifications

Regular/Super/Crew Cab Chassis/Model		471	472	474	475
Make T.Obj: 29, 30		Dana/Spicer®	Dana/Spicer	Dana/Spicer	Dana/Spicer
Max. Rating @ Ground (lbs.)		13,500	17,500	19,000	21,000
Type		Single	Single	Single	SIngle
Housing	Type	Fabricated	Fabricated	Fabricated	Fabricated
Lubricant Capacity (pts.)		19.0	19.0	19.0	27.9
Wheel Bearings	Type	Tapered	Tapered	Tapered	Tapered
Gears	Type	Hypoid	GenTech	GenTech	Hypoid
Ring Gear	Pitch Diameter (in.)	13.4	13.4	13.4	15.0
Differential	Type	Open	Open	Open	Open
Axle Shaft	Minimum Diameter (in.)	1.81	1.81	1.81	1.89
	No. of Splines (Hub End)	39	39	39	41

Regular/Super/Crew Cab Chassis/Model		476	477	479
Make T.Obj: 29		Dana/Spicer	Dana/Spicer	Dana/Spicer
Max. Rating @ Ground (lbs.)		21,000	21,000	23,000
Type		Single	2-speed	Single
Housing	Type	Fabricated	Fabricated	Fabricated
Lubricant Capacity (pts.)		27.9	35.1	37.0
Wheel Bearings	Type	Tapered	Tapered	Tapered
Gears	Type	Hypoid	Hypoid	Hypoid
Ring Gear	Pitch Diameter (in.)	15.0	17.0	17.7
Differential	Type	Driver Control — Locking	Open	Open
Axle Shaft	Minimum Diameter (in.)	1.89	1.87	2.06
	No. of Splines (Hub End)	41	41	46

Regular/Super/Crew Cab Chassis/Model		47P	47X
Make T.Obj: 29		Dana/Spicer	Dana/Spicer
Max. Rating @ Ground (lbs.)		23,000	26,000
Type		Single	Single
Housing	Type	Fabricated	Fabricated
Lubricant Capacity (pts.)		37.0	37.0
Wheel Bearings	Type	Tapered	Tapered
Gears	Type	Hypoid	Hypoid

Ring Gear	Pitch Diameter (in.)	17.7	18.5
Differential	Type	Driver Control — Locking	Open
Axle Shaft	Minimum Diameter (in.)	2.06	2.25
	No. of Splines (Hub End)	46	46

Hydraulic Brake Equipment Specifications — Front/Rear Disc

2019 F-650/ F-750 Super Duty Chassis Cabs

Specs > Chassis

Type	Axle (lbs.) T.Obj: 29	Rotor Dia. (in.) OD Thickness	Lining Thickness (in.)	Caliper Piston No. Dia.	Lining Area Per Axle/Wheel (sq. in.)	Total Swept Area Per Axle (sq. in.)
Front	8500	15.00 x 1.44	.49	4/70 mm (2.8")	41.7	41.7
	10,000/12,000/ 13,200	15.00 x 1.44	.74	4/70 mm (2.8")	41.7	41.7
Rear	15,500(1)	15.00 x 1.44	.49	4/70 mm (2.8")	41.7	83.4
	17,500/19,000/ 21,000/23,000	15.00 x 1.44	.74	4/70 mm (2.8")	41.7	83.4

(1) 4/64 mm on rear with 19.5" tire option.

Hydraulic Brake Master Cylinder Specifications

2019 F-650/ F-750 Super Duty Chassis Cabs

Specs > Chassis

Type	Model/Series	Piston Dia. (in.)	Stroke (in.)	Fluid Displacement Ratio (prim./sec.)	Nominal Displacement (prim./sec.) (cu. in.)
Dual System, Dash-mounted	All	2.00	2.25	50 Frt./50 Rr.	3.35/3.35

Air Brake Equipment Specifications — Front Drum

2019 F-650/ F-750 Super Duty Chassis Cabs

Specs > Chassis

Type	Axle (lbs.)	Shoe/Pad Length x Width (in.)	Lining Thickness (in.)	Drum Area Per Axle (sq. in.)	ChamberDiaphragm Area (sq. in.)	Dust Shield
Meritor/Q-Plus S-Cam	8500 10,000/ 12,000/ 13,200	15.00 x 4.00	.73	230	20	Removable
	14,000	16.50 x 7.00	.73	420	20	Removable

Air Brake Equipment Specifications — Rear Drum

2019 F-650/ F-750 Super Duty Chassis Cabs

Specs > Chassis

Type	Axle (lbs.)	Shoe/Pad Length x Width (in.)	Lining Thickness (in.)	Drum Area Per Axle (sq. in.)	Chamber Diaphragm Area (sq. in.)	Dust Shield
Meritor/Q-Plus S-Cam	17,500	15.00 x 8.63	.85	440	30	Removable
	19,000/ 21,000/ 23,000	16.50 x 7.00	.85	440	30	Removable

Hydraulic Brake Booster Specifications

2019 F-650/ F-750 Super Duty Chassis Cabs

Specs > Chassis

Type	Model/Series	Mounting	Booster Stroke (in.)
Bosch/Hydromax II	All	To cowl with master cylinder	2.468

Air Compressor Specifications

2019 F-650/ F-750 Super Duty Chassis Cabs

Specs > Chassis

Make	CFM	Compressor Size (Bore x Stroke) (in.)	Cooling	Lubrication	Drive
Bendix®	13.2	Twin 2.78 x 1.50	Water	Engine Oil	Pulley

2019 F-650/ F-750 Super Duty Chassis Cabs

Air Brake Air Dryer Specifications

Specs > Chassis

Make/Model	Dimensions Height x Diam. (in.)	Weight	Remarks
Bendix®/AD-IP	12.0 x 8.0	24 lbs.	Heated, Internal Purge

2019 F-650/ F-750 Super Duty Chassis Cabs

Air Brake Slack Adjuster Specifications

Specs > Chassis

Axle	Make	Description
Front and Rear	Meritor®	5.5" length

2019 F-650/ F-750 Super Duty Chassis Cabs

Bumper Specifications

Specs > Chassis

Size	Material	Finish
Full-width	0.1875" thick steel	Painted, Carbon Black
Full-width	0.1875" thick steel	Plated, Chrome

2019 F-650/ F-750 Super Duty Chassis Cabs

Steering Specifications

Cab Style	Wheelbase (in.)	8.5K Axle Turning Radius				10K/12K/14K Axle Turning Radius			
		To Curb		To Wall		To Curb		To Wall	
		ft.	in.	ft.	in.	ft.	in.	ft.	in.
Regular Cab	146	20	9	22	4	20	6	22	1
	158	22	3	23	10	21	11	23	7
	176	24	5	26	1	24	2	25	9
	182	25	2	26	9	24	10	26	6
	194	26	8	28	3	26	4	27	11
	200	27	5	29	0	27	0	28	8
	212	28	1	29	9	28	1	29	9
	218	28	10	30	6	28	10	30	6
	224	29	7	31	2	29	7	31	2
	230	30	3	31	11	30	3	31	11
	242	31	8	33	4	31	8	33	4
	260	33	10	35	6	33	10	35	6
	281	36	4	38	0	36	4	38	0
SuperCab	167	23	4	24	11	23	1	24	8
	179	24	10	26	5	24	6	26	1
	197	27	0	28	8	26	8	28	3
	203	27	1	28	8	27	1	28	8
	215	28	6	30	1	28	6	30	1
	221	29	2	30	10	29	2	30	10
	233	30	8	32	3	30	8	32	3
	239	31	4	33	0	31	4	33	0
	245	32	1	33	8	32	1	33	8
	251	32	9	34	5	32	3	34	5
	263	34	3	35	10	34	3	35	10
	281	36	4	38	0	36	4	38	0
Crew Cab	182	25	2	26	9	24	10	26	6
	194	26	8	28	3	26	4	27	11
	212	28	1	29	9	28	1	29	9
	218	28	10	30	6	28	10	30	6
	230	30	3	31	11	30	3	31	11

	236	31	0	32	7	31	0	32	7
	248	32	5	34	1	32	5	34	1
	254	33	2	34	9	33	2	34	9
	260	33	10	35	6	33	10	35	6
	266	34	7	36	3	34	7	36	3
	278	36	0	37	8	36	0	37	8

Power Steering Pump Specifications

2019 F-650/ F-750 Super Duty Chassis Cabs

Specs > Chassis

Engine	Manufacturer/Model	Reservoir Capacity (max.)	Pump Drive
All	ZF/Bosch ZN4	5.0L – 5.5L	Belt

Shock Absorber Specifications — Front Only

2019 F-650/ F-750 Super Duty Chassis Cabs

Specs > Chassis

Model	Wheelbase (in.)	Usage	No. Used	Piston Dia. (in.)	Type
All	All	Std.	2	1.42	Double-acting

Shock Absorber Specifications — Rear Steel Suspension Only

2019 F-650/ F-750 Super Duty Chassis Cabs

Specs > Chassis

Model	Wheelbase (in.)	Usage	No. Used	Piston Dia. (in.)	Type
All	All	Opt.	2	1.42	Double-acting

Shock Absorber Specifications — Rear Only (with Air Suspension)

2019 F-650/ F-750 Super Duty Chassis Cabs

Specs > Chassis

Model	Wheelbase (in.)	Usage	No. Used	Piston Dia. (in.)	Type
All	All	Std.	2	1.38	Double-acting
All	All	Std. High-TorqueApplication	2	1.63	Double-acting

2019 F-650/ F-750 Super Duty Chassis Cabs

Spring Specifications — Front Leaf

Specs > Chassis

Series/Model	Combined Rating @ Ground (lbs.)	Number of Leaves	Total Thickness @ Pad (in.)	Active Length (in.) x Width (in.)	Deflection Rate (Installed) (lb./in.)
All	8500	2	3.62	62.0 x 3.15	1027
	10,000	2	3.58	62.0 x 3.15	1147
	12,000	2	3.60	62.0 x 3.15	1521
	13,200	3	3.60	62.0 x 3.15	1593
	14,000	3	3.66	62.0 x 3.15	1705

2019 F-650/ F-750 Super Duty Chassis Cabs

Spring Specifications — Rear Leaf

Specs > Chassis

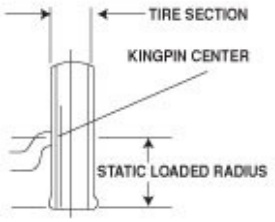
Series/Model	Combined Rating @ Ground (lbs.)	No. of Leaves	Total Thickness @ Pad (in.)	Active Length (in.) x Width (in.)	Deflection Rate (Installed) (lb./in.)
F-650 Pro Loader	15,500	10	7.18	54.3 x 3.0	3540 (4990 Aux. Leaf Eng.)
All F-650	19,000	11	7.75	54.3 x 3.0	4026 (5476 Aux. Leaf Eng.)
F-650 with Straight Frame and All F-750	21,000	11	8.03	54.3 x 3.0	4743 (6193 Aux. Leaf Eng.)
All F-750	23,000	11	8.30	54.3 x 3.0	5290 (6740 Aux. Leaf Eng.)
	31,000	11	9.06	54.3 x 3.0	7810 (9260 Aux. Leaf Eng.)

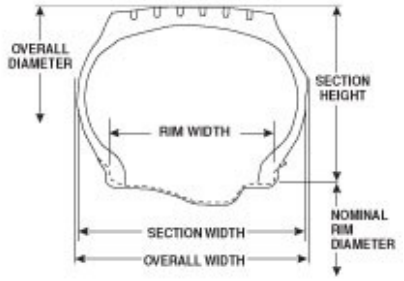
2019 F-650/ F-750 Super Duty Chassis Cabs

Aspect Ratio

Specs > Chassis > Tire Terminology

Defined as: Section Height divided by Section Width.



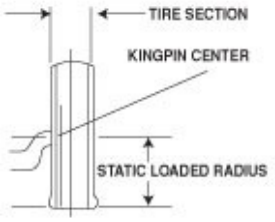


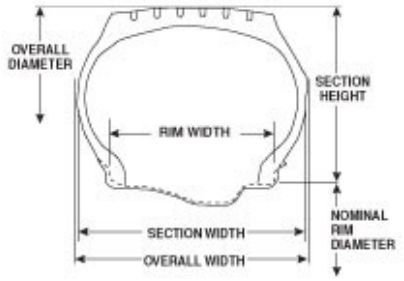
2019 F-650/ F-750 Super Duty Chassis Cabs

Rim Width

Specs > Chassis > Tire Terminology

Linear distance between the flanges of the rim.



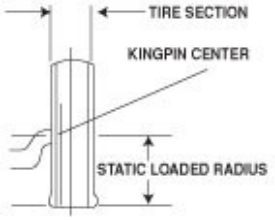


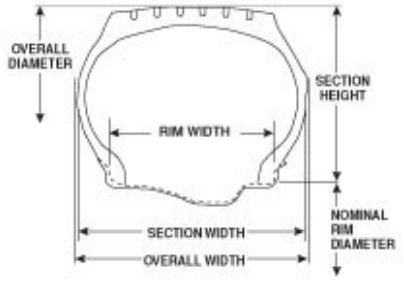
2019 F-650/ F-750 Super Duty Chassis Cabs

Static Loaded Radius

Specs > Chassis > Tire Terminology

Distance from wheel axle centerline to supporting tread surface at a given load and inflation pressure in a static condition.



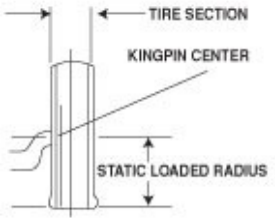


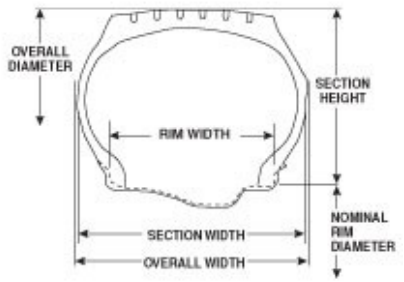
2019 F-650/ F-750 Super Duty Chassis Cabs

Tire (Overall) Width

Specs > Chassis > Tire Terminology

Width of a new tire, including 24-hour inflation growth, and including protective side ribs, bars and decorations.



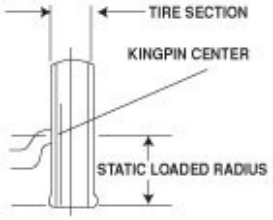


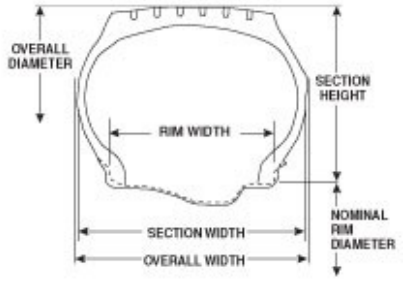
2019 F-650/ F-750 Super Duty Chassis Cabs

Tire Section

Specs > Chassis > Tire Terminology

Linear distance between outside of sidewalls of inflated tire, exclusive of decorations, markings or borders.



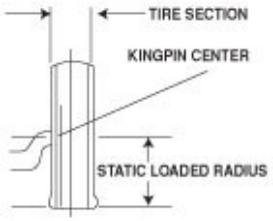


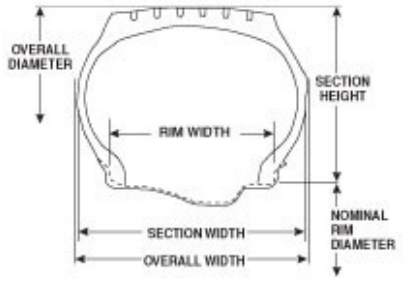
2019 F-650/ F-750 Super Duty Chassis Cabs

Section Height

Specs > Chassis > Tire Terminology

Half the difference between the overall diameter and the nominal rim diameter.



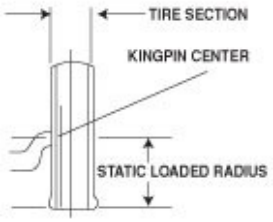


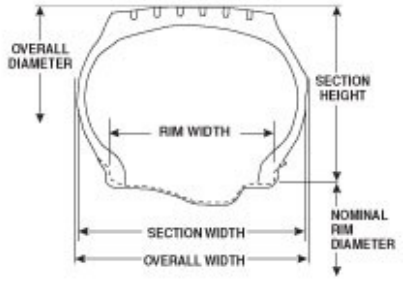
2019 F-650/ F-750 Super Duty Chassis Cabs

Overall Diameter

Specs > Chassis > Tire Terminology

Diameter of an inflated tire at the outermost surface of the tread, including 24-hour inflation growth.



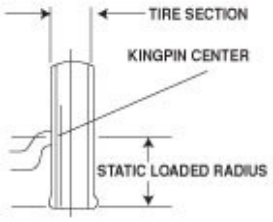


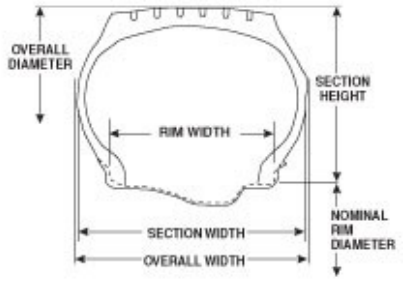
2019 F-650/ F-750 Super Duty Chassis Cabs

Size Factor

Specs > Chassis > Tire Terminology

Sum of the tire width and overall diameter of an inflated tire.



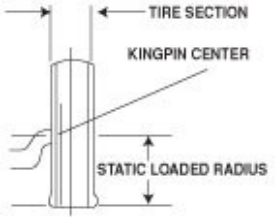


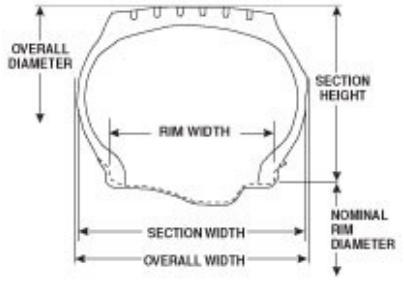
2019 F-650/ F-750 Super Duty Chassis Cabs

Revolutions per Mile

Specs > Chassis > Tire Terminology

Measured number of revolutions for a tire traveling one mile.
This can vary with speed, load and inflation.



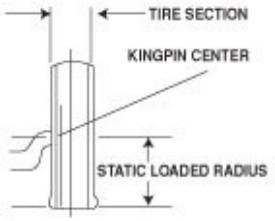


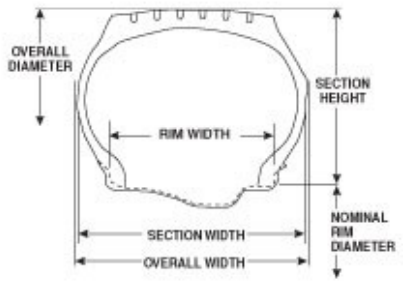
2019 F-650/ F-750 Super Duty Chassis Cabs

Tread Width

Specs > Chassis > Tire Terminology

Distance across tread from shoulder to shoulder.



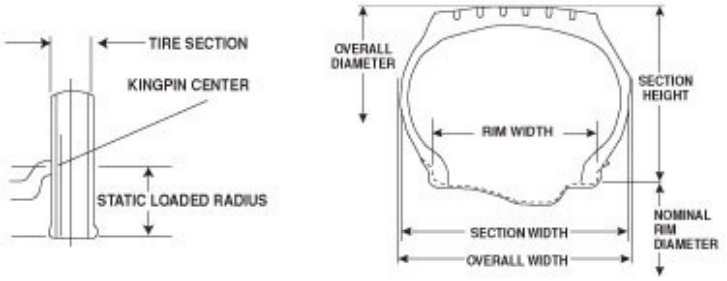


2019 F-650/ F-750 Super Duty Chassis Cabs

Width Loaded

Specs > Chassis > Tire Terminology

Tire width (overall) under rated load conditions.

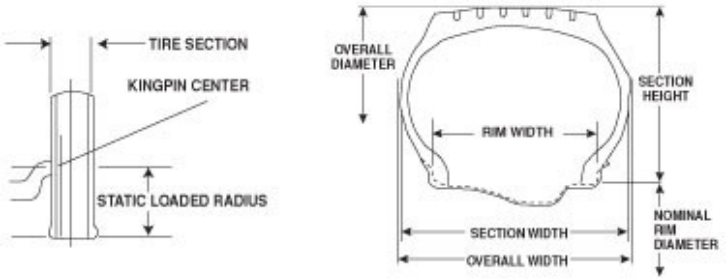


2019 F-650/ F-750 Super Duty Chassis Cabs

Minimum Dual Spacing

Specs > Chassis > Tire Terminology

Minimum dual tire centerline to centerline measurement.



Tire Specifications(1) — 19.5" Wheel Configurations

		Max. Tire and Wheel Capacity per Axle (lb.) @ psi	
Size	**Wheel Width (in.) and Type**	**Front**	**Rear**
245/70R19.5G	6.75, 8-stud steel	9080 @ 110	17,200 @ 110
	7.50, 10-stud steel	9080 @ 110	17,200 @ 110
	7.50, 10-stud aluminum	9080 @ 110	17,200 @ 110
245/70R19.5H	6.75, 8-stud steel	9880 @ 115	18,700 @ 115
	7.50, 10-stud steel	9880 @ 115	18,700 @ 115
	7.50, 10-stud aluminum	9880 @ 115	18,700 @ 115
265/70R19.5G	6.75, 8-stud steel	10,140 @ 110	18,700 @ 110
	7.50, 10-stud steel	10,140 @ 110	18,700 @ 110
	7.50, 10-stud aluminum	10,140 @ 110	18,700 @ 110

(1) Some tires may be discontinued or require substitution. Refer to Commercial Vehicle Tools (CVT) for current availability.

Tire Specifications[1] — 22.5" Wheel Configurations

Size	Wheel Width (in.) and Type	Max. Tire and Wheel Capacity per Axle (lb.) @ psi	
		Front	Rear
11R22.5G	7.50, 10-stud steel	12,350 @ 105	23,360 @ 105
	8.25, 10-stud steel	12,350 @ 105	23,360 @ 105
	8.25, 10-stud aluminum	12,350 @ 105	23,360 @ 105
11R22.5H	7.50, 10-stud steel	13,220 @ 120	24,020 @ 120
	8.25, 10-stud steel	13,220 @ 120	24,020 @ 120
	8.25, 10-stud aluminum	13,220 @ 120	24,020 @ 120
255/70R22.5H	7.50, 10-stud steel	11,020 @ 120	20,280 @ 120
	8.25, 10-stud steel	11,020 @ 120	20,280 @ 120
	8.25, 10-stud aluminum	11,020 @ 120	20,280 @ 120
275/80R22.5G	7.50, 10-stud steel	12,350 @ 110	22,700 @ 110
	8.25, 10-stud steel	12,350 @ 110	22,700 @ 110
	8.25, 10-stud aluminum	12,350 @ 110	22,700 @ 110
275/80R22.5H	7.50, 10-stud steel	14,330 @ 120	26,455 @ 120
	8.25, 10-stud steel	14,330 @ 120	26,455 @ 120
	8.25, 10-stud aluminum	14,330 @ 120	26,455 @ 120
295/80R22.5H	7.50, 10-stud steel	15,660 @ 120	27,760 @ 120
	8.25, 10-stud steel	15,660 @ 120	27,760 @ 120
	8.25, 10-stud aluminum	15,660 @ 120	27,760 @ 120

(1) Some tires may be discontinued or require substitution. Refer to Commercial Vehicle Tools (CVT) for current availability.

2019 F-650/ F-750 Super Duty Chassis Cabs

Wheel Specifications

Specs > Chassis

Wheel Type	Position	Wheel Size	No. of Studs	Bolt Circle mm (in.)
Steel, Powder-coated White	Front	19.5" x 6.75"	8	275 (10.83)
Steel, Powder-coated White	Rear	19.5" x 6.75"	8	275 (10.83)
Steel, Powder-coated White	Front	19.5" x 7.50"	10	285.5 (11.25)
Steel, Powder-coated White	Rear	19.5" x 7.50"	10	285.5 (11.25)
Aluminum, Polished	Front	19.5" x 7.50"	10	285.5 (11.25)
Aluminum, Polished	Rear	19.5" x 7.50"	10	285.5 (11.25)
Steel, Powder-coated White	Front	22.5" x 7.50"	10	285.5 (11.25)
Steel, Powder-coated White	Rear	22.5" x 7.50"	10	285.5 (11.25)
Steel, Powder-coated White	Front	22.5" x 8.25"	10	285.5 (11.25)
Steel, Powder-coated White	Rear	22.5" x 8.25"	10	285.5 (11.25)
Aluminum, Polished	Front	22.5" x 8.25"	10	285.5 (11.25)
Aluminum, Polished	Rear	22.5" x 8.25"	10	285.5 (11.25)

2019 F-650/ F-750 Super Duty Chassis Cabs

Windshield Wipers

Specs > Chassis

Make	Arm Length	Blade Length
Trico	22.25"	19.0"

Alternator Specifications

Alternator (Integral Regulator Type)	Alternator Output (Amperes)		Alternator Operating Specifications			
	Idle	Maximum	Rated Output (Watts)	Cut-in (rpm)(1)	Maximum Output Speed (rpm)(2)	Drive
157 Amp Denso Brushless Type (Straddle Mount)	See Output Curves	See Output Ourves	2100	1100	20,000	Belt
175 Amp (Axial Mount)	See Output Curves	See Output Curves	TBD	1100	—	Belt
200 Amp Denso Brushless Type (Straddle Mount)	See Output Curves	See Output Curves	2700	1100	20,000	Belt
220 Amp Denso Brushless Type (Straddle Mount)	See Output Curves	See Output Curves	2970	1100	20,000	Belt
240 Amp (Axial Mount)	See Output Curves	See Output Curves	2900	1300	—	Belt

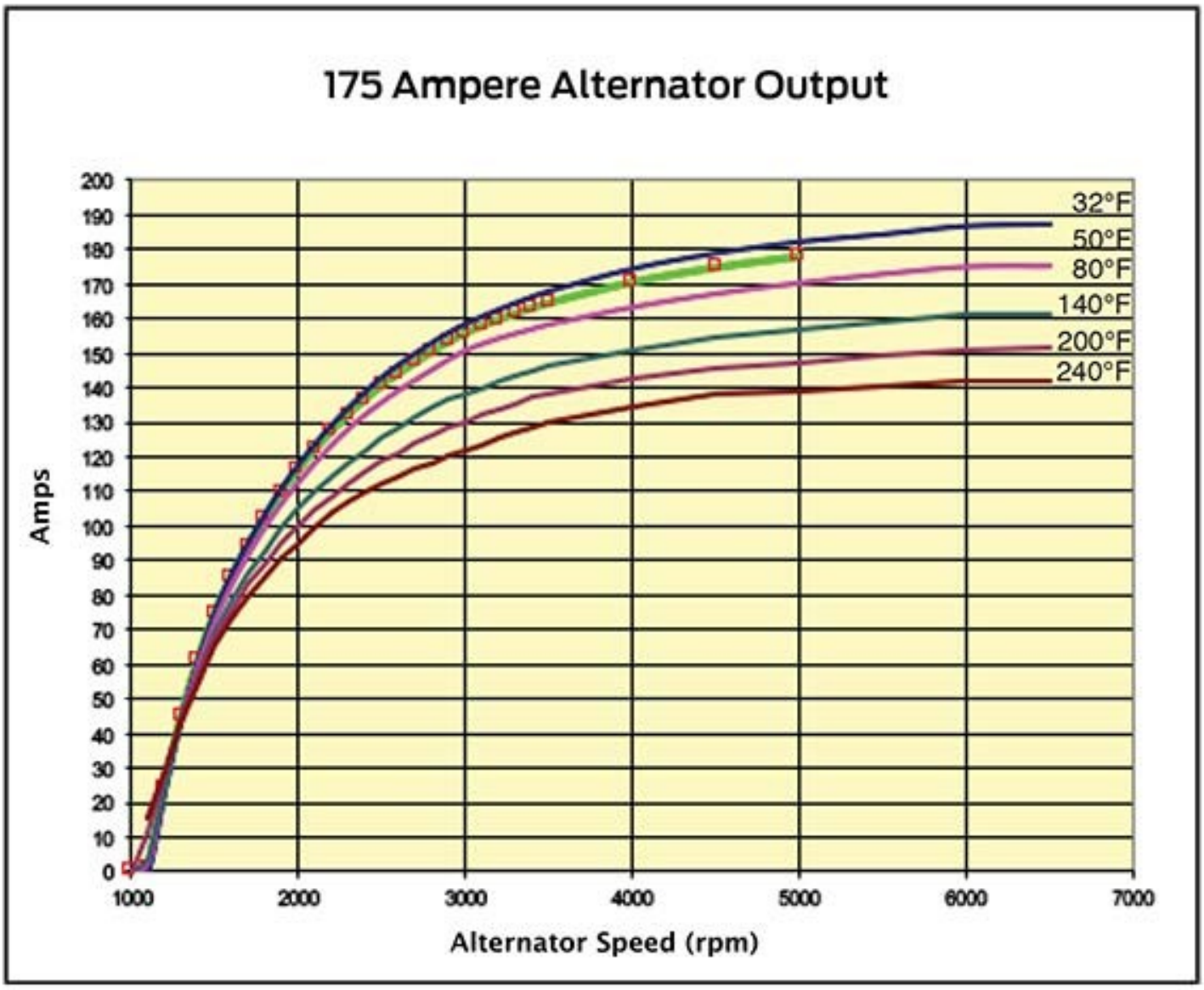
(1) Alternator rpm, not engine rpm.

(2) Short run rpm rating. Maximum rpm for continuous run is 18,000.

NOTE: For alternator performance data curves, refer to the Medium Duty Component Information Data Book.

175 Amperes Alternator

Engine	Pulley Ratio	Model Application
6.8L SEFI V10	2.99:1	F-650/F-750 Super Duty

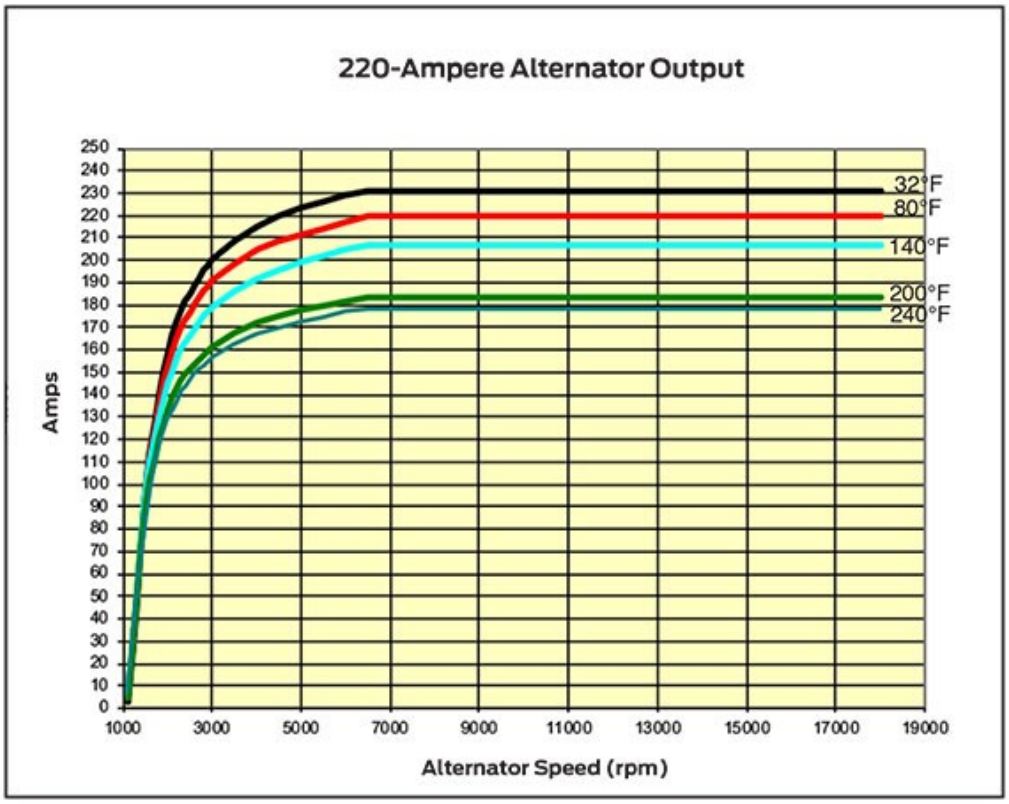


220 Amperes Alternator

!! PROCESS NOTE !!

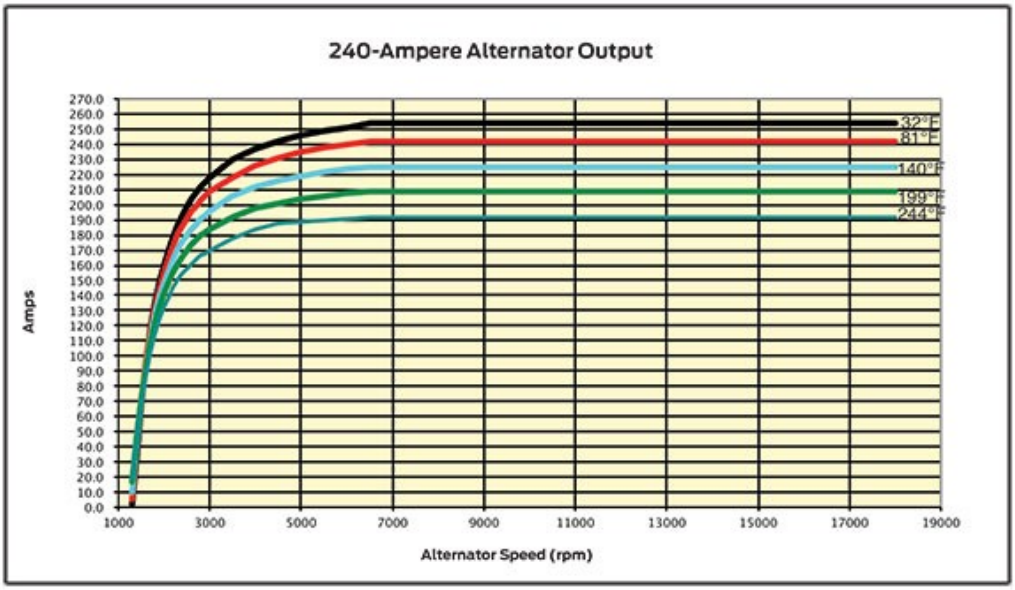
Validation Note: Need color version of chart.

Engine	Pulley Ratio	Model Application
6.7L Power Stroke V8 Turbo Diesel	3.09:1	F-650/F-750 Super Duty



240 Amperes Alternator

Engine	Pulley Ratio	Model Application
6.8L SEFI V10	2.95	F-650/F-750 Super Duty

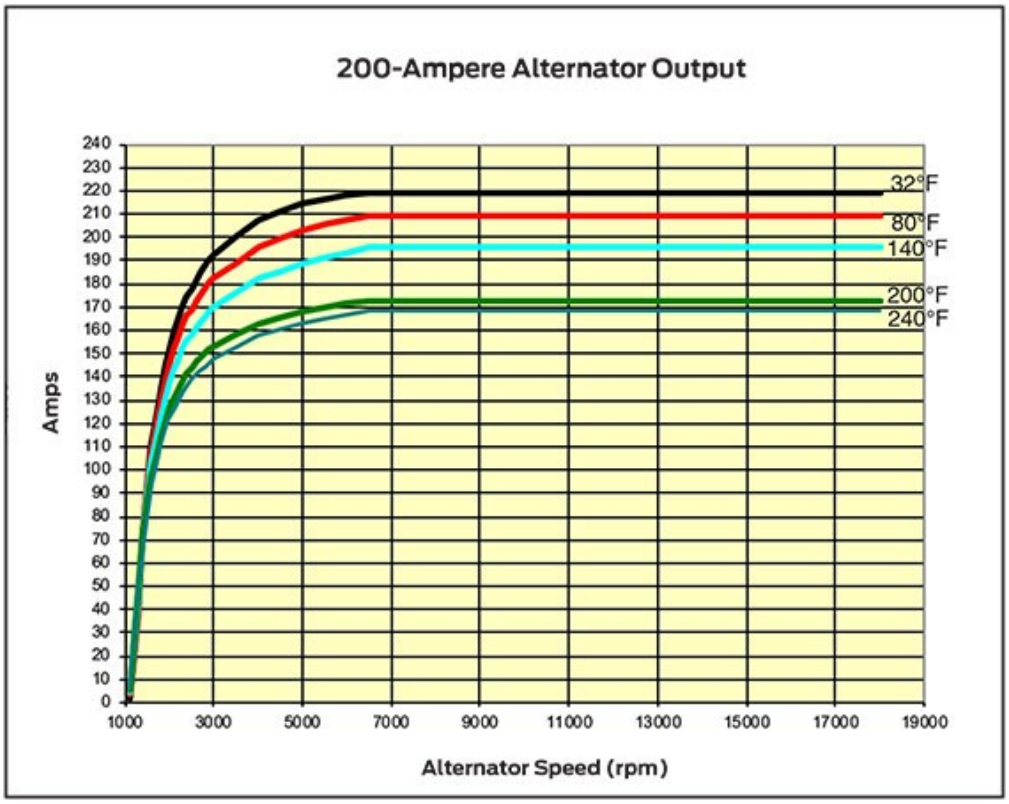


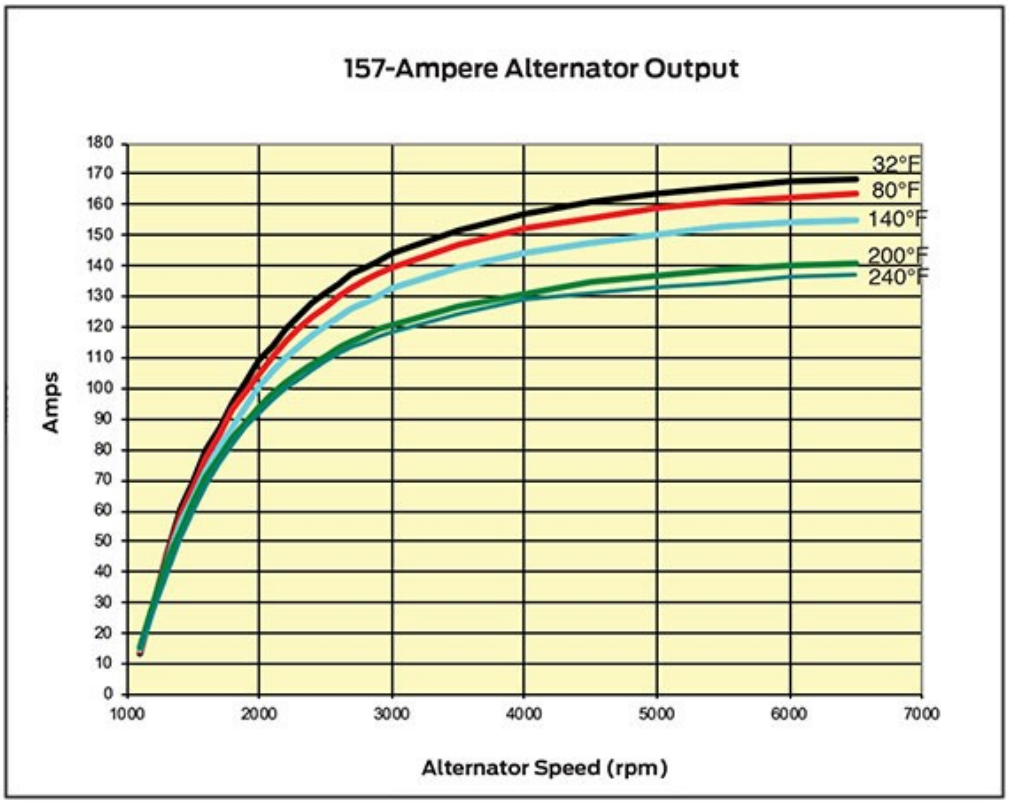
200/157 Amperes Alternator (DUAL)

!! PROCESS NOTE !!

Validation Note: Need color version of charts.

Engine	Pulley Ratio	Model Application
6.7L Power Stroke V8 Turbo Diesel	3.09:1 (primary) 2.78:1 (secondary)	F-650/F-750 Super Duty





Battery Applications

2019 F-650/ F-750 Super Duty Chassis Cabs

Specs > Electrical

Ampere-Hour Rating	90	100
Cold-Cranking Amps at 0°F	**750**	**900**
F-650/F-750 Super Duty		
6.7L Power Stroke V8 Turbo Diesel	Std.(1)	Opt.(2) Opt.(3)
6.8L SEFI V10		Std. Opt.(2)

(1) Dual batteries — 1500 CCA.

(2) Dual batteries — 1800 CCA.

(3) Three batteries — 2700 CCA.

2019 F-650/ F-750 Super Duty Chassis Cabs

Cold Weather Recommendations

Specs > Electrical

Ref: /content/ret-ford/en/common-content/appendices/2016/electrical/cold-weather-recommendations/jcr:content/content/text

Minimum Temperature	Equipment	
	HD Battery	Engine Block Heater
0°F	Suggested	Not Needed
-10°F	Recommended	Suggested
-20°F	Recommended	Recommended
Below -20°F	Strongly Recommended	Strongly Recommended

DEFINITIONS

Suggested: Helpful, but not needed.

Recommended: Could improve reliability in less-than-ideal conditions.

Strongly Recommended: Will give definite improvement over the standard components.

HD Battery: Higher-capacity battery available. (Usage varies by model.)

Engine Block Heater: Available equipment for all engines. (Usage and heater capacity vary with engine requirements.)

END OF REFERENCE BLOCK

2019 F-650/ F-750 Super Duty Chassis Cabs

Standard Lighting/Reflector Equipment

Specs > Electrical

Light Reflector	Application
Headlamps (Halogen)	All Series — Two replaceable bulbs with all models
Parking Lights	All Series — Integral with turn signals
Front/Rear Turn Signals	All Series
Front Side Marker Lights	All Series
Front Side Reflectors	All Series
Rear Side Reflectors	All Series
Front Cab Clearance and Identification Lights — 5 Amber	F-Series Dual Rear Wheel Models, F-650/ F-750
Rear Side Marker Lights	All Series — integral with taillamps
License Plate Lights	All Series
Two Combination Taillamps with Integral Stop, Turn Signal and Backup Lamps and Reflective Surface	All Series
Rear Reflectors	All Series
Front Daytime Running Lamps	All Vehicles Registered in Canada

2019 F-650/ F-750 Super Duty Chassis Cabs

Light Specifications and Usage

Specs > Electrical

Ref: /content/ret-ford/en/common-content/appendices/2016/electrical/light-specifications-and-usage/jcr:content/content/text

Light	Code	Description	Usage
Cab Marker — (5 lights) Amber	STD	Torpedo, Hella	All Model Series
Daytime Running Lamps	STD	(2) Replaceable bulbs, Halogen	All Vehicles Registered in Canada
Headlamps	STD	(2) Replaceable bulbs, Halogen	All Vehicles Registered in U.S. and Canada

END OF REFERENCE BLOCK

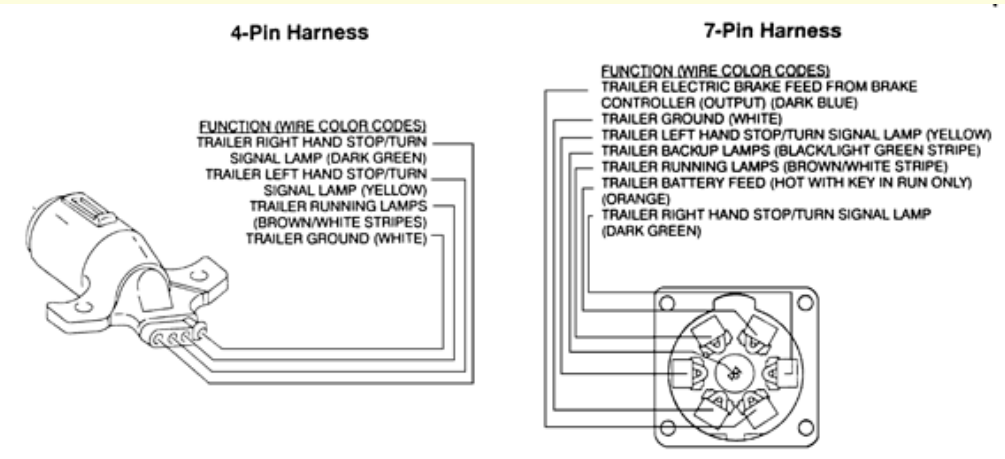
2019 F-650/ F-750 Super Duty Chassis Cabs

Trailer Towing Wiring Harness

Specs > Electrical

Ref: /content/ret-ford/en/common-content/appendices/2016/electrical/trailer-towing-wiring-harness/jcr:content/content/text

Circuit Number	Circuit Description	Color Code
RAT08	Ground	White
CAT17	Park Lamps	Brown
CAT14	Trailer Battery Feed	Orange
CAT19	To Electric Brakes	Dark Blue
CAT09	RH Turn Signal and Stop Lamps	Dark Green
CAT06	LH Turn Signal and Stop Lamps	Yellow
CAT03/CAT16	Trailer Backup Lamps	Gray with Brown Stripe
CBP30	Front Brake Controller Running Lamp Feed/Park Lamp Feed	Yellow with Blue Stripe
CBP40	Rear Brake Controller Running Lamp Feed/Park Lamp Feed	Yellow with Green Stripe
CLS30	Brake Controller Running Lamp Feed/Park Lamp Feed	Violet with White Stripe
CCB08	Vehicle Stop Lamps	Violet with White Stripe
SBB18/SBB17	B+ to Electric Brake Controller	Yellow with Red Stripe


4-Pin Harness
FUNCTION (WIRE COLOR CODES)
TRAILER RIGHT HAND STOP/TURN SIGNAL LAMP (DARK GREEN)
TRAILER LEFT HAND STOP/TURN SIGNAL LAMP (YELLOW)
TRAILER RUNNING LAMPS (BROWN/WHITE STRIPES)
TRAILER GROUND (WHITE)
7-Pin Harness
FUNCTION (WIRE COLOR CODES)
TRAILER ELECTRIC BRAKE FEED FROM BRAKE CONTROLLER (OUTPUT) (DARK BLUE)
TRAILER GROUND (WHITE)
TRAILER LEFT HAND STOP/TURN SIGNAL LAMP (YELLOW)
TRAILER BACKUP LAMPS (BLACK/LIGHT GREEN STRIPE)
TRAILER RUNNING LAMPS (BROWN/WHITE STRIPE)
TRAILER BATTERY FEED (HOT WITH KEY IN RUN ONLY) (ORANGE)
TRAILER RIGHT HAND STOP/TURN SIGNAL LAMP (DARK GREEN)

END OF REFERENCE BLOCK

Trailer Tow Cable

Circuit Description	Location	Max. Fuse Size (Amp.)	Load by Body Builder	Type	Harness	Circuit No.	Circuit Color	Circuit Gauge	Recommended Insulation
Ground	—	—	—	—	PTO8-54297(1)	206	WH	10	BX
Rear Taillamp	SPDJB#22/40	15/10	10(2)	Mini	PTO8-54297(1)	CLS30/CBP40	VT-WH/YE-GR	14	BX
LH Stop/Turn	SPDJB#6/14	20/15	10(3)	Mini	PTO8-54297(1)	CLS18	GY-BN	16	BX
RH Stop/Turn	SPDJB#6/13	20/15	10(3)	Mini	PTO8-54297(1)	CLS19	VT-OG	16	BX
Stop	PDB#30	10	7	Mini	PTO8-54297(1)	CCB08	VT-WH	20	BX
Stop	SPDJ31	5	7	Mini	PTO8-54297(1)	CCB08	VT-WH	20	BX
Side Marker	SPDJB#22/30	15	10(2)	Mini	PTO8-54297(1)	CLS30/CBP30	VT-WH/YE-BL	18	BX
ABS Feed (Run Only)	PDB#53/54	10/5	7	Mini (Low-Profile)	PTO8-54292	CBB53/CBB54	GY-BN/VT-OR	20	BX

(1) The proper harness can be determined by looking at PTO8-54297 for PDB information, PTO8-54149 for back of cab and PTO8-54150 for end of frame.

(2) Sum of loads for side marker and taillamps not to exceed 21 amps.

(3) Sum of loads for side LH stop/turn and RH stop/turn lamps not to exceed 21 amps.

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